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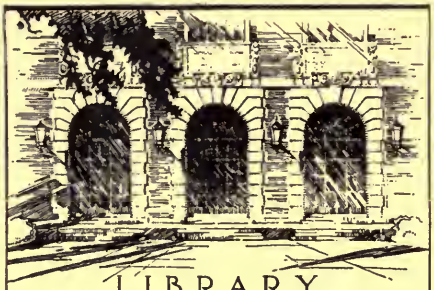

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CHICAGO

COMMERCE, MANUFACTURES,

BANKING,

—AND—

TRANSPORTATION FACILITIES.

1884.

PUBLISHED BY
S. FERD. HOWE & CO.
PRICE, $2.00.

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PREFACE

THE marvelous progress made in the commerce and manufactures of Chicago, has suggested the idea that a complete and exhaustive review of the leading branches of trade would prove of inestimable advantage to the commercial interests of the city, as well as of absorbing interest to all business men throughout the United States. Various publications have been made, from time to time, which have pretended to have such a purpose for their object; but all, or nearly all of these, have proved to be merely personal advertising schemes.

In presenting this review of "Chicago Commerce in 1884" to subscribers and the public, the publishers wish it to be understood, that it is their intention, that this work should form the basis of similar annual publications.

The principal object being to afford to country merchants particularly, and to bankers and capitalists in the East and in Europe, the fullest information obtainable regarding all the most important business interests of the city, and to present in each issue as accurate and complete a statement of the condition, development and prospects of each leading line of business as can possibly be obtained.

Statistics compiled from the best and most reliable sources will form a large feature of each work; but these will be elaborated and illuminated with carefully written reviews setting forth in concise form all the particular advantages and circumstances that have led up to the present stage of growth, and which give promise of yet greater advancement. In short, these books will be a compendium of information for the guidance and enlightenment of merchants and dealers of all kinds in the great Western, Northwestern and Southwestern Territories, now tributary, and which can be made tributary to this city.

Every effort has been, and will be made in the future, to keep the pages of these works free from all appearance, even, of advertising individual interests; but, to make them the best advertisements of the general interests of Chicago by giving reliable and full accounts of the prominent industries of the whole city.

OFFICE: No. 166 Randolph St., Chicago.

COMPLETE

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Will be found at the End of the Book.

SPECIAL NOTICE.

All persons to whom a copy of this Work is forwarded are particularly requested to acknowledge, by mail, the receipt of the same to the sender.

Introductory Review.

When we say that the phenomenal enterprise of Chicago has been a surprise to the civilized world, we are merely clothing in simplest words an unquestionable fact. Cobden, than whom no thinker of modern times observed closer, or was better qualified to estimate the commercial promise and importance of a city, counseled a traveling friend to see Chicago and Niagara, the two unapproachable wonders of the New World. This, however, was some years ago, and since that time the development of our city has distanced rivalry, outrun precedent, and surpassed the expectations of the most sanguine. Indeed her marvelous record may be fairly said to have added a new chapter to the possibilities of urban growth. While other cities have gradually doubled in population by means of their natural increase and the slow accretions of emigration, Chicago has quadrupled, not only in numbers but in extent, as well as in the magnitude and importance of her commercial and industrial facilities. Year by year she has pushed her confines back upon the prairie, environing and absorbing a score of outlying suburbs. Year by year trade has been creeping up the residence streets, invading the once sacred precincts

of fashion, and driving its dwellers North and South to lake front park and boulevard. The great fire modernized the city, leveling the ground, and rendering possible the uniform elegance of the business portion. Its lessons and its benefits have been thus invaluable, teaching as it did the necessity of prudence and ampler protection, and supplanting acres of less pretentious structures with the iron and marble magnificence of to-day. Chicago energy has become proverbial. She aims to lead, to outshine, to outdo, and is content with the second place only where her geographical position precludes the possibility of her attaining the first. Her constant endeavor is to make her structures more costly and complete than similar ones in other cities; public buildings, parks and works are designed to excel the best models, and private enterprise has ever the same end in view. This in fact is the clew and the key to Chicago's greatness, and it is this ambition which has made us, if we may be allowed a novel expression, the superlative city of the world, in the sense that we contain more of best things than are to be found in any other city. For example, the most complete hotel, the most exquisitely decorated theater, the most perfect and extensive system of public parks.

Without inquiring exhaustively into the reasons, we may thus accept as an undoubted fact that extraordinary growth is the normal condition of Chicago. More than a decade ago she sprang to the front among our inland cities in the race for commercial supremacy, and as all the broad West pays tribute to her, the growth of the newer States and cities only strengthens her position. Indeed, Chicago is remarkably situated in that she is nearer than any other city to the centers of population, of wealth; and when we consider the vast belt of arid and mountainous country in the West, she is the city nearest the geographical center of productive soil in a country three thousand by one thousand miles in extent.

Our commercial facilities are owing in great part to our immense natural advantages. Commerce in this country moves on parallels of latitude, but ours is a movement in all directions, since we are situated on the only great East and West water-way in North America, and at the center of a web of steel whose radii reach the ocean in three directions, and to the northward touch the limit of civilized life. Our advantages of site are equally striking, our lake, our level streets, our forked river, and our many railroads, affording as they do unequaled opportunities for traffic, while back of all is the illimitable possibility of expansion, inviting industries by the certainty of low rents and an amplitude of room. Owing to this, our superiority is easily maintained, and our ability to lead the world in handling natural products, lumber, live stock, etc., while as the nearest concentrative point for the harvests of the West, we have long stood at the head of the world's great cities as a market for grain.

Then, too, while handling the products of the West, and being, in addition, the largest distributing center for the manufactured articles of the East, we are rapidly taking rank with the foremost cities in home manufactures, in many special branches of which, as will be seen from the following pages, Chicago claims a foremost place.

As a residence city, there are few in the land more desirable, the summer climate in particular rendering it unusually and uniformly healthful and delightful. The park system is the admiration of visitors, embracing as it does the beautiful resorts known as Lincoln, South, Garfield, Douglas, Jackson, Humboldt, Union, Jefferson, Rogers, and Douglas Monument Parks. Its public buildings, the finest in the West, include the Post Office, Custom House, City Hall, Court and Jail buildings, the Cook County Hospital, the North and West Side Water Works, and others less import-

ant; and finally, the system of internal transportation is unequaled in the country, the city being belted with a converging network of cable and horse railway lines, which render access to any portion both easy and expeditious.

It is scarcely necessary to extend these prefatory remarks, since the details of the chief industries of the city will be found in this volume in their appropriate places. The following brief historical summary of important events in the life of the city may not, however, be uninteresting, as illusing the marvelous rapidity of its growth.

A derivation of the name Chicago, certainly poetical, and perhaps as well authenticated as any other, derives the word from the Indian word "Checaque," meaning thunder. Be this as it may, in 1662 the first white travelers, the Jesuit Fathers Marquette and Joliet, visited Northern Illinois. In 1778 the site of the future city was in the territory of Virginia. In 1787 Illinois was a county of Virginia. In 1795 the Indians ceded to the United States a tract of land six miles square, at the mouth of the Chicago River. In 1796 came the first settler, a negro, from San Domingo. In 1800 the site of the city was included in the territory of Indiana. Three years later came the first sailing vessel, the "Tracy," of Detroit. 1804 witnessed the erection of Fort Dearborn at the mouth of the river. In 1809 it was part of the territory of Illinois. In 1812 the Indians massacred the settlement. In 1818 there were again two resident families. In 1825 John Kinzie became the first Justice of the Peace, and thirteen tax payers paid a tax of $40.47 on a tax list of $4,047. In 1826 the first white woman, Mrs. Trask, made the place her home. In 1827 arrived R. E. Heacock, the first lawyer. In 1830 the place boasted a school mistress in Mrs. Stephen Forbes. In 1831 Caleb Blodgett built a brick house on the north side of Adams Street, between Dearborn and State, and this year also saw the organization of

Cook County. In 1832 they had a Sunday-school; the next year a jail, a Postmaster, a weekly mail, and a minister of the Gospel, a Methodist by the way. In 1834 the first schooner entered the river, and the first wagon rolled into the town, which now enjoyed a Sunday prohibitory liquor law, with a penalty of five dollars; while 1835 brought twin calamities in the shape of the first divorce and the first church fair. In 1837 the city was chartered, and chose Wm. B. Ogden as its first Mayor. In 1839 came the first daily newspaper, "The Daily American," the first censu,s showing 4,170 residents, of whom 77 were black, and 104 sailors; and the first directory, containing 1,660 names. In 1840 a side-wheel steamer was built on the river. In 1850 a railroad ran out of the city forty miles, to Elgin, Ill., and Chicago now had 30,000 inhabitants. In 1852 the Michigan Central Railroad brought the first passengers from the East. In 1857 they purchased a steam fire engine, and named it the "Long John," from the then Mayor, John Wentworth. In 1859 came the horse cars. In 1860 the census showed a population of 112,172. In 1870 it had swelled to 300,000, and finally, in 1871, October 10th, the terrible fire made the year forever memorable.

The marvelous recuperative powers of the city, the indomitable energy with which, individually and as a community, they set to work to repair their losses; the undaunted, uncomplaining, unhesitating pluck with which the millionaires and merchant princes of yesterday began anew at the foot of the ladder, and the consequent giant strides by which the city regained and passed her former eminence, is one of the most surprising chapters in the annals of any people. Without unnecessary amplification or an exhaustive statistical inquiry into her progress since the fire, we may yet give comparative figures, showing the growth of two or three of the more prominent industries. In the year ending March 1, 1874,

1,826,560 hogs were packed for exportation. A decade later, in the year which closed March 1, 1883, the number had swollen to 4,222,780. During 1864, 338,840 cattle were received in the city. In 1883, the number had increased to 1,878,944. Finally, the receipts of grain in 1853 aggregated 6,928,459 bushels, while subsequent years have placed her at the head of the grain market of the world, her receipts during 1883 reaching the colossal figures of 164,924,732 bushels, and even this has been greatly exceeded by the receipts of 1884.

CHICAGO COMMERCE

—:IN:—

1884

BANKING AND FINANCE.

All the varied interests of the country are more or less directly dependent on the banks. Both as storehouses and distributors of money, they are indispensable to a prosperous commercial people, and it should be the policy of legislators to free rather than to hamper them by unwise enactments. Cut down the legitimate profits of an institution and you drive it to extra hazards, which impair its stability; prosperity and integrity go hand in hand.

The simplest form of bank was a place for the safe keeping of deposited money, but time has added other functions of equal importance. The primary object of banking, as of all other legitimate business, is a fair remuneration, but their right to this seems to be more questioned as their usefulness increases. No one who has watched the tendencies of the times can be unaware that a silent contraction,

wide-spread and potent, is changing monetary conditions. This is owing—according to eminent financial authority—to the excessive hoarding of bank notes, which may be attributed in a great measure to an unreasoning distrust of savings banks, born of the occasional failures and the chain of defalcations which recently startled the Atlantic cities.

Although the money thus retired is mostly in the hands of small holders, the volume withdrawn by this means from circulation is so vast as to make the tabular official statements as to the quantity of notes and specie in movement throughout the country far from being correct.

This incidentally demonstrates a fact of a different nature, and that is the perfect confidence in which the issues of our banks are held. The reverse of this, it will be remembered, was the case in 1857, when the bank notes issued under legislative enactments of the several States were received with such disfavor and distrust that men made haste to pay them out in liquidation of debts, for fear they might depreciate in value on their hands; the hoarding of those days being confined to gold and silver.

Thus it happened somewhat singularly that their very weakness enabled them to successfully perform their functions, and thus it is, that through periods of panic and depression we are slowly tending to a banking system of so much elasticity as to adjust itself to the ever changing conditions born of the phenomenal growth of our country in resources and population.

That the banks of Chicago are making a rapid and steady progress which will soon give them rank with the greatest in the world, must be evident to the least informed. Their true pre-eminence, however, its causes, and the vast volume of business transacted by them, are little understood even by our own citizens. Still this may be partly because their growth has been a steady normal development, and for

that reason unnoted. It would require disturbance or derangement to direct public attention to them, and in that sense a bank is like a nation, "happiest when it has no history."

For the past, the record has been most gratifying, showing as it does, good profits, increased surplusses, strengthened confidence, extended business facilities, and connections with the leading banking centers of the world. In fact our banks are now depended on to a great extent to furnish Eastern exchange for other cities, and Chicago has become the recognized financial center of the West—bearing indeed the same relation to the West that New York does to the entire country. We are growing each year more and more independent, and owing to the accumulation of capital here, we rarely have been occasioned to order currency from the East. In a thoughtful review of the monetary interests of this city the "Tribune" says: "Chicago is rising more and more towards the position of clearing-house city for the banks of the West and Northwest. The country banks prefer to keep their reserves here, knowing that Chicago banks compare favorably in regard to strength and integrity with those of Eastern cities, while the time required for actual cash transfers is much less—which is often an important item. They have also learned to regard this city as a never-failing source of aid in cases of extraordinary demand incidental to crop movements. Even the larger cities of the West depend upon us to a considerable extent. St. Louis, Cincinnati and Milwaukee have largely availed themselves during the last year of the facilities which Chicago affords for effecting commercial exchanges."

The following statement will in a measure serve to show the magnitude of the business conducted in this city. First, the individual deposits exceed in amount those of all the rest of the State. Second, one National Bank in Chicago

alone has a larger sum of money on deposit than any other National Bank in the country outside of New York. Third, Chicago has one National Bank with nearly ten millions committed to its custody by individual depositors, one with over five millions, two with over three millions, two with more than two millions, and two with between one and two millions on deposit. Outside of Chicago in this State the Alton National Bank alone has more than a million dollars intrusted to it by depositors.

There has been no demoralization in the loan market here as in the East. Rates have varied from 5 to 7 per cent., while call money has been obtainable at 4 per cent. Indeed a fund loaned by the banks subject to a demand call has added great strength to their reserve power, and enabled them to continue that moderate, prudent help of the needy which has long been their policy.

The facilities of Chicago banks for doing European business are unsurpassed even by New York. In fact, we are the only inland city with such direct exchange. In addition to this, the enormous shipments of products from here leave constantly a large balance in our favor, which enables us at all times to supply other cities with Eastern exchange. When Cincinnati and St. Louis make shipments to European ports, bills of lading, drafts and the proceedings necessary for collection are made through New York or Boston. In Chicago the entire business is transacted by our banks direct with the port of consignment, thus effecting an important saving in time and intermediate commissions and expenses.

Capital naturally seeks the West as the best field for investment, and is largely and constantly accumulating. This development directly benefits us, since we are the depository for the country banks of a wide, prosperous territory, including Iowa, Missouri, Kansas, and even remoter

States, all of which keep their large balances here. While Eastern wealth is in manufactories, often closed or working on half time, we have no idle factories, and the crops of each year add to our intrinsic wealth, which is keeping pace in its increase with the unparalleled growth of our population. This has rendered our banks almost entirely independent of New York, as was abundantly demonstrated during the recent financial troubles in that city, which did not affect a single banking institution here; in fact, no bank failure has occurred in Chicago since 1877.

The men at the head of Chicago banks, and the list includes some of the most eminent authorities on finance in the United States, are neither given to speculation nor to be tempted into the maelstrom of politics. They are men of broad views, conservative and practical, and closely identified with the prosperity of the city. Though any quantity of money can always be obtained here for legitimate purposes, hazardous schemes and the fatal method of doing business on stock exchange collateral, as the result of which New York City banks now carry a debt of one hundred and sixty millions, whose payment depends on these securities, find little encouragement here. To this prudence and integrity may be attributed our immunity from failures, as well as from the epidemic of speculative cashiers and defalcations which has swept the Eastern States.

Still, though always safe, Chicago banks are eminently successful. To give some idea of the various sources from which they derive their revenue, we may state that in one year the single item of loans and discounts reached the enormous sum of $300,000,000.

The Clearing House, which was established as a private institution in 1870, was incorporated under the State laws in 1882, and its present membership consists of twelve National Banks, five State, and two large Canadian banks which have branch offices here.

The capital and surplus employed by these institutions as returned to the Clearing House October 1, 1884, which was the last date that the reports were made up, aggregate $21,900,828.

Their detailed statements returned to the Clearing House on the date mentioned, compared with the same time in 1883, were as follows:

	1884.	1883.
Number of Banks.....	19	19
Capital.....	$14,186,000	$13,886,000
Surplus and Undivided Profits	7,714,828	4,931,000
Deposits.....	78,173,000	81,078,000
Loans.....	57,580,000	61,509,000

Banks outside of the Clearing House employ a capital estimated at $3,000,000, making a total aggregate banking capital of $24,900,828.

This, however, by no means fully represents the entire capital employed in banking in Chicago, as the Canadian banks having offices here only return to the Clearing House the amount with which they are charged as fixed capital by the banks they represent, and are always at liberty to call on their home institutions for any further sum they can use.

The expansion of the city's commercial and financial transactions is partly reflected by the report of the Ch cago Clearing House, furnished by its efficient manager, W. S. Smith, Esq., which is as follows:

COMPARATIVE CLEARINGS.

The following shows the clearings from 1865 to 1883, inclusive:

1865 (nine months)	$319,606,000 00
1866	453,798,648 11
1867	580,727,331 43
1868	723,293,144 91
1869	734,664,949 91
1870	810,676,036 28
1871	868,936,754 20
1872	993,060,503 47
1873	1,047,027,828 33
1874	1,001,347,948 41
1875	1,212,817,207 64
1876	1,101,092,624 37
1877	1,044,678,475 70
1878	967,184,093 07
1879	1,257,756,124 31
1880	1,725,684,894 85
1881	2,229,097,450 60
1882	2,366,536,855 00
1883	2,525,622,944 00

Following will be found the latest statements of the leading banks of the city:

THE FIRST NATIONAL BANK
OF CHICAGO.

SEPTEMBER 30, 1884.

RESOURCES.

Loans and discounts		$9,991,240 72
Overdrafts		18,035 34
U. S. bonds to secure circulation		50,000 00
U. S. bonds on hand		83,900 00
Other bonds		559,950 00
Due from approved reserve agents	$1,076,371 34	
Due from other National banks	504,210 70	
Due from State banks and bankers	586.525 23	
		2,167,107 27
Real estate, banking house		500,000 00
Exchanges for Clearing House	$839,371 83	
Bills of other banks	186,000 00	
Fractional paper currency, nickels and pennies,	3,126 89	
Specie	1,854,383 10	
Legal-tender notes	2,311,630 00	
Redemption fund with U. S. Treasurer (5 per cent of circulation)	2,250 00	
Due from U. S. Treasurer, other than 5 per redemption fund	26,750 00	
		5,223,511 82
Total		$18,593,745 15

LIABILITIES.

Capital stock paid in		$3,000,000 00
Surplus fund		400,000 00
Undivided profits		301,727 50
Dividends unpaid		75,450 00
Individual deposits subject to check	$7,294,175 23	
Demand certificates of deposit	872,138 13	
Certified checks	148,928 70	
Cashier's checks outstanding	16,064 09	
Due to other National banks	3,750,173 74	
Due to State banks and bankers	2,735,087 76	
		14,816,567 65
Total		$18,593,745 15

SAMUEL M. NICKERSON, Pres. LYMAN J. GAGE, Vice-Pres.
HENRY R. SYMONDS, Cashier.

MERCHANTS' NATIONAL BANK

OF CHICAGO.

SEPTEMBER 30, 1884.

RESOURCES.

Loans and discounts		$4,408,722 82
Overdrafts		366 94
U. S. bonds to secure circulation at par		50,000 00
U. S. bonds on hand at par		520,150 00
Other stocks, bonds and mortgages		40,500 00
Due from approved reserve agents	$877,034 28	
Due from other National banks	512,737 81	
Due from State banks and bankers	35,985 01	
		1,425,757 10
Real estate, banking house	$125,000 00	
Other real estate	34,362 18	
		159,362 18
Exchanges for Clearing House	$211,048 46	
Bills of other banks	496,443 00	
Fractional paper currency, nickels and pennies,	1 65	
Specie (gold coin)	2,337,439 00	
Silver coin	18,751 94	
Legal-tender notes	200,000 00	
		3,263,684 05
Redemption fund with U. S. Treasurer (5 per cent of circulation)		2,250 00
Due from U. S. Treasurer, other than 5 per cent redemption fund		1,000 00
Total)		$9,871,793 09

LIABILITIES.

Capital stock paid in		$500,000 00
Surplus fund		500,000 00
Undivided profits		610,843 74
National bank notes outstanding		45,000 00
Individual deposits subject to check	$3,582,865 77	
Demand certificates of deposit	152,526 96	
Certified checks	25,667 74	
Cashier's checks outstanding	5,657 30	
		3,766,717 77
Due to other National banks	$2,823,150 06	
Due to State banks and bankers	1,626,081 52	4,449,231 58
Total		$9,871,793 09

C. B. BLAIR, President. JOHN C. NEELY, Cashier.

COMMERCIAL NATIONAL BANK

OF CHICAGO.

SEPTEMBER 30, 1884.

RESOURCES.

Loans and Discounts		$4,014,926 65
Overdrafts		1,358 96
U. S. bonds to secure circulation		50,000 00
Other stocks, bonds, and mortgages		115,750 00
Due from approved reserve agents	$626,329 42	
Due from other National banks	230,688 14	
Due from State banks and bankers	59,513 89	916,531 45
Real Estate		9,403 37
Checks and other cash items	1,055 40	
Exchanges for Clearing House	256,654 37	
Bills of other banks	211.963 00	
Fractional paper currency, nickels and pennies,	542 71	
Specie	821,000 00	
Legal-tender notes	700,000 00	
Redemption fund with U. S. Treasurer (5 per cent. of circulation)	2,250 00	
Due from U. S. Treasurer, other than 5 per cent. redemption fund	3,000 00	1,996,465 48
Total		$7,104,435 91

LIABILITIES.

Capital stock paid in		$500,000 00
Surplus fund		500,000 00
Undivided profits		240,094 45
National bank notes outstanding		45,000 00
Individual deposits subject to check	$3,390,742 17	
Demand certificates of deposit	230,431 09	
Certified checks	57,537 57	
Cashier's checks outstanding	204,806 57	
Due to other National banks	915,138 82	
Due to State banks and bankers	1,020,685 24	5,819,341 46
Total		$7,104,435 91

HENRY T. EAMES, President. GEO. L. OTIS, Vice-President.
FREDERICK S. EAMES, Cashier.

CHICAGO NATIONAL BANK,

SEPTEMBER 30, 1884.

RESOURCES.

Loans and discounts		$1,668,616 81
Overdrafts		2,539 81
United States bonds to secure circulation		50,000 00
United States bonds on hand		100,000 00
Other stocks and bonds		83,500 00
Premiums paid		15,000 00
Due from approved reserve agents	$206,491 37	
Due from other National banks	167,719 04	
Due from State banks and bankers	22,253 41	
Exchanges for Clearing House	141,173 65	
Bills of other banks	51,200 00	
Fractional paper currency, nickels and pennies,	83 42	
Specie	26,000 00	
Legal-tender notes	255,000 00	
United States certificates of deposit for legal-tenders	300,000 00	
Redemption fund with U.S Treasurer (5 per cent. of circulation)	2,250 00	
Due from U. S. Treasurer, other than 5 per cent. redemption fund	8,000 00	
		1,180,170 89
Total		$3,099,827 51

LIABILITIES.

Capital stock paid in		$300,000 00
Surplus fund		60,000 00
Undivided profits		25,742 15
National bank notes outstanding		45,000 00
Individual deposits subject to check	$2,456,805 77	
Demand certificates of deposit	89,151 66	
Certified checks	29,616 34	
Cashier's checks outstanding	945 73	
Due to other National banks	49,628 95	
Due to State banks and bankers	42,936 91	
		2,669,085 36
Total		$3,099,827 51

DIRECTORS.

F. MADLENER. J. M. ADSIT. ADOLPH LOEB.
ANDREW MCNALLY. LEVI ROSENFIELD. J. R. WALSH.

JOHN R. WALSH, President. H. H. NASH, Cashier.

CONTINENTAL NATIONAL BANK

OF CHICAGO,

SEPTEMBER 30, 1884.

RESOURCES.

Loans and discounts		$4,032,979 42
Overdrafts		2,179 56
U. S. bonds to secure circulation		50,000 00
Due from approved reserve agents	$285,646 00	
Due from other National banks	302,172 32	
Due from State banks and bankers	421,404 31	
		1,009,222 63
Real estate, furniture, and fixtures		11,471 61
Current expenses and taxes paid		19,684 65
Premiums paid		12,000 00
Checks and other cash items	$572 94	
Exchanges for Clearing House	460,308 08	
Bills of other banks	172,958 00	
Fractional paper currency, nickels and pennies	472 67	
Specie	411,571 00	
Legal-tender notes	453,958 00	
		1,499,840 69
Redemption fund with U. S. Treasurer (5 per cent of circulation)		2,250 00
Total		$6,639,628 56

LIABILITIES.

Capital stock paid in		$2,000,000 00
Surplus fund		110,000 00
Undivided profits		54,250 40
National bank notes outstanding		44,500 00
Dividends unpaid		735 00
Individual deposits subject to check	$2,140,117 42	
Demand certificates of deposit	333,622 58	
Certified checks	185,430 16	
Cashier's checks outstanding	50,000 00	
Due to other National banks	1,079,584 77	
Due to State banks and bankers	641,388 23	
		4,430,143 16
Total		$6,639,628 56

C. T. WHEELER, President. JOHN C. B. BLACK, Cashier.

CORN EXCHANGE BANK

OF CHICAGO,

SEPTEMBER 30, 1884.

RESOURCES.

Loans and discounts	$5,081,338 78	
Stocks and bonds	149,356 25	
Due from National banks	1,718,153 98	
Due from State banks and bankers	286,937 22	
Checks and cash items	613 61	
Exchanges for Clearing House	347,454 01	
Bills of other banks	90,494 00	
Fractional currency and nickels	119 93	
Gold coin	206,937 50	
Silver coin	3,250 00	
Legal-tender notes	610,000 00	
		$8,494,655 28

LIABILITIES.

Capital stock paid in	$1,000,000 00	
Surplus fund	1,000,000 00	
Undivided profits	289,740 92	
Individual deposits subject to check	5,440,623 32	
Demand certificates of deposit	68,473 65	
Cashier's checks outstanding	623,873 92	
Due banks and bankers	71,943 47	
		$8,494,655 28

B. P. HUTCHINSON. S. A. KENT. C. L. HUTCHINSON.

C. C. SWINBOURNE, Assistant Cashier.

METROPOLITAN NATIONAL BANK

OF CHICAGO.

SEPTEMBER 30, 1884.

RESOURCES.

Loans and discounts		$1,294,217 18
Overdrafts		2,484 35
U. S. bonds to secure circulation		50,000 00
Other bonds, at cost		76,348 92
Due from approved reserve agents	$169,556 62	
Due from other National banks	108,239 04	
Due from State banks and bankers	137,245 23	
		415,100 89
Furniture and fixtures		5,500 00
Current expenses and taxes paid		18,651 36
Premiums paid		6,447 35
Checks and other cash items	$ 3,038 92	
Exchanges for Clearing House	99,764 77	
Bills of other banks	75,320 00	
Fractional paper currency, nickels and pennies	414 65	
Specie (gold coin)	183,845 00	
Legal-tender notes	66,898 00	
Silver coin	2,074 25	
Redemption fund with U. S. Treasurer (5 per cent of circulation)	2,250 00	
Due from U. S. Treasurer, other than 5 per cent redemption fund	5,000 00	
		438,605 59
Total		$2,307,355 64

LIABILITIES.

Capital stock paid in		$500,000 00
Undivided profits		47,056 21
National bank notes outstanding		45,000 00
Individual deposits subject to check	$829,416 96	
Demand certificates of deposit	80,173 75	
Certified checks	23,615 04	
Cashier's checks outstanding	5,713 80	
Due to other National banks	165,842 69	
Due to State banks and bankers	610,537 19	
		1,715,299 43
Total		$2,307,355 64

ELBRIDGE G. KEITH, Pres. SAMUEL A. KEAN, Vice Pres.

THE UNION NATIONAL BANK

OF CHICAGO.

SEPTEMBER 30, 1884.

RESOURCES.

Loans and discounts		$5,360,461 09
Overdrafts		1,458 18
U. S. bonds to secure circulation		50,000 00
U. S. bonds on hand		146,300 00
Other stocks, bonds, and mortgages		623,500 00
Due from approved reserve agents	$347,956 79	
Due from other National banks	169,532 06	
Due from State banks and bankers	164,427 41	
		681,916 26
Real estate, furniture, and fixtures		57,067 57
Premiums paid		15,848 01
Exchanges for Clearing House	$503,952 19	
Bills of other banks	68,000 00	
Fractional paper currency, nickels and pennies,	819 00	
Specie	619,400 00	
Legal-tender notes	700,000 00	
Redemption fund with U. S. Treasurer (5 per cent of circulation)	2,250 00	
Due from U. S. Treasurer, other than 5 per cent redemption fund	25,000 00	
		1,919,421 19
Total		$8,855,972 30

LIABILITIES.

Capital stock paid in		$1,000,000 00
Surplus fund		800,000 00
Undivided profits		210,743 35
National bank notes outstanding		45,000,00
Individual deposits subject to check	$4,070,291 64	
Demand certificates of deposit	56,344 31	
Certified checks	111,135 86	
Cashier's checks outstanding	180,142 89	
Due to other National banks	1,453,704 08	
Due to State banks and bankers	928,610 17	
		6,800,228 95
Total		$8,855,972 30

W. C. D. GRANNIS, President. JOHN J. P. ODELL, Cashier.

NORTHWESTERN NATIONAL BANK

OF CHICAGO.

SEPTEMBER 30, 1884.

RESOURCES.

Loans and discounts		$1,632,040 28
Overdrafts		1,584 42
U. S. bonds to secure circulation		200,000 00
U. S. bonds to secure deposits		100,000 00
U. S. bonds on hand		31,600 00
Due from approved reserve agents	$305,993 35	
Due from other National banks	98,406 20	
Due from State banks and bankers	71,649 26	
		476,048 81
Checks and other cash items	$163 54	
Exchanges for Clearing House	114,183 07	
Bills of other banks	8,492 00	
Fractional paper currency, nickels and pennies	601 98	
Specie	160,340 25	
Legal-tender notes	100,000 00	
Redemption fund with U. S. Treasurer (5 per cent of circulation)	9,000 00	
		392,780 84
Total		$2,834,054 35

LIABILITIES.

Capital stock paid in		$200,000 00
Surplus fund		50,000 00
Undivided profits		56,306 70
National bank notes outstanding		171,400 00
Individual deposits subject to check	$1,599,680 30	
Demand certificates of deposit	46,387 15	
Certified checks	29,319 92	
United States deposits	67,973 21	
Due to other National banks	399,682 69	
Due to State banks and bankers	213,304 38	
		2,356,347 65
Total		$2,834,054 35

GEORGE STURGES, President.

NATIONAL BANK OF AMERICA,

SEPTEMBER 30, 1884.

RESOURCES.

Loans and discounts		$2,300,894 73
Overdrafts		1,093 56
U. S. bonds to secure circulation		50,000 00
U. S. bonds to secure deposits		100,000 00
Other stocks, bonds and mortgages		71,000 00
Due from approved reserve agents	$379,935 52	
Due from other National banks	115,754 56	
Due from State banks and bankers	22,558 04	
		518,248 12
Premiums paid		25,312 50
Checks and other cash items	$3,434 90	
Exchanges for Clearing House	137,117 01	
Bills of other banks	33,251 00	
Fractional paper currency, nickels and pennies	7 89	
Specie	163,397 50	
Legal-tender notes	700,000 00	
		1,037,208 30
Redemption fund with U. S. Treasurer (5 per cent of circulation)		2,250 00
Total		$4,106,007 21

LIABILITIES.

Capital stock paid in		$1,000,000 00
Surplus fund		140,000 00
Undivided profits		42,878 85
National bank notes outstanding		45,000 00
Dividends unpaid		344 00
Individual deposits subject to check	$1,677,680 96	
Demand certificates of deposit	149,038 39	
Certified checks	8,900 79	
United States deposits	64,941 27	
Due to other National banks	495,142 72	
Due to State banks and bankers	482,080 23	
		2,877,784 36
Total		$4,106,007 21

ISAAC G. LOMBARD, Pres. EDWARD B. LATHROP, Cashier.

THE NATIONAL BANK OF ILLINOIS.

SEPTEMBER 30, 1884.

RESOURCES.

Loans and discounts		$4,020,922 42
Overdrafts		13,454 15
U. S. bonds to secure circulation		50,000 00
U. S. bonds on hand, at par		260,800 00
Other stocks and bonds, at par		136,620 00
Due from approved reserve agents	$368,532 09	
Due from other National banks	114,901 10	
Due from State banks and bankers	62,805 18	
		546,238 37
Real estate, furniture and fixtures		24,743 58
Exchanges for Clearing House	292,310 15	
Bills of other banks	75,400 00	
Fractional paper currency, nickels and pennies,	158 04	
Specie	202,200 00	
Legal-tender notes	516,480 00	
U. S. certificates of deposit for legal-tenders	40,000 00	
		1,126,548 19
Redemption fund with U. S. Treasurer (5 per cent of circulation)		2,250 00
Total		$6,181,576 71

LIABILITIES.

Capital stock paid in		$1,000,000 00
Surplus fund		300,000 00
Undivided profits		47,502 08
National bank notes outstanding		45,000 00
Dividends unpaid		320 00
Deposits—Individual	$3,925,670 68	
Deposits—Banks	863,083 95	
		4,788,754 63
Total		$6,181,576 71

GEO. SCHNEIDER, President. WILLIAM A. HAMMOND, Cashier.

HIDE AND LEATHER NATIONAL BANK

ON CHICAGO.

SEPTEMBER 30, 1884.

RESOURCES.

Loans and discounts		$868,809 72
Overdrafts		3,723 91
U. S. bonds to secure circulation		233,500 00
U. S. bonds on hand, 4 per cents		1,950 00
Other bonds at cost		19,124 44
Due from approved reserve agents	$98,122 80	
Due from other National banks	90,437 54	
Due from State banks and bankers	21,821 31	
		210,381 65
Premium on U. S. bonds, paid		434 12
Checks and other cash items	$3,541 25	
Exchanges for Clearing House	69,161 51	
Bills of other banks	15,415 00	
Fractional paper currency, nickels and pennies	70 07	
Specie and U. S. gold certificates	244,300 00	
Legal-tender notes	150,000 00	
U. S. certificates of deposit for legal tenders	200,000 00	
Circulating notes of this bank on hand	500 00	
		718,987 83
With U. S. Treasurer, 5 per cent redemption fund		15,507 50
Total		$2,072,419 17

LIABILITIES.

Capital stock paid in		$300,000 00
Surplus fund		80,000 00
Undivided profits		29,716 83
National bank notes outstanding		210,150 00
Dividends unpaid		6,076 00
Individual deposits subject to check	$1,210,546 83	
Demand certificates of deposit	25,726 23	
Certified checks	38,950 58	
Cashier's checks outstanding	8,842 08	
Due to other National banks	58,817 63	
Due to State banks and bankers	103,592 99	
		1,446,476 34
Total		$2,072,419 17

CHARLES F. GREY, President.

THE HOME NATIONAL BANK

OF CHICAGO.

SEPTEMBER 30, 1884.

RESOURCES.

Loans and discounts		$364,523 51
Overdrafts		16,270 33
U. S. bonds to secure circulation		50,000 00
U. S. bonds on hand		275,000 00
Other stocks, bonds and mortgages		63,730 00
Due from approved reserve agents	$41,985 50	
Due from other National banks	23,693 58	
Due from State banks and bankers	23,727 81	
		89,406 89
Real estate, furniture and fixtures		5,277 02
Current expenses and taxes paid		6,005 79
Premiums paid		29,270 00
Checks and other cash items	$2,764 08	
Exchanges for Clearing House	19,879 35	
Bills of other banks	15,290 00	
Fractional paper currency, nickels and pennies	35 81	
Specie	140,450 00	
Legal-tender notes	65,000 00	
Redemption fund with U. S. Treasurer (5 per cent of circulation)	2,250 00	
Due from U. S. Treasurer, other than 5 per cent redemption fund	1,000 00	
		246,669 24
Total		$1,146,152 78

LIABILITIES.

Capital stock paid in		$250,000 00
Surplus fund		100,000 00
Undivided profits		31,394 74
National bank notes outstanding		32,300 00
Individual deposits subject to check	$412,830 88	
Demand certificates of deposit	319,165 09	
Certified checks	397 00	
Cashier's checks outstanding	65 07	
		732,458 04
Total		$1,146,152 78

ALBERT M. BILLINGS, President. GEO. W. FULLER, Cashier.

UNION STOCK YARD NATIONAL BANK

OF CHICAGO.

SEPTEMBER 30, 1884.

RESOURCES.

Loans and discounts		$1,105,854 22
Overdrafts		7,540 10
U. S. bonds to secure circulation		50,000 00
Other stocks, bonds and mortgages		9,750 00
Due from approved reserve agents	$316,286 43	
Due from other National banks	236,909 82	553,196 25
Checks and other cash items	5,514 70	
Bills of other banks	67,323 00	
Fractional paper currency, nickels and pennies	99 24	
Specie	27,875 52	
Legal-tender notes	67,811 00	168,623 46
Redemption fund with U. S. Treasurer (5 per cent of circulation)		2,250 00
Total		$1,897,214 03

LIABILITIES.

Capital stock paid in		$500,000 00
Surplus fund		100,000 00
Undivided profits		17,370 14
National bank notes outstanding		45,000 00
Dividends unpaid		15,000 00
Individual deposits subject to check	$759,301 74	
Demand certificates of deposit	193,763 45	
Due to other National banks	259,575 62	
Due to State banks and bankers	7,203 08	1,219,843 89
Total		$1,897,214 03

ELMER WASHBURN, President. GEORGE E. CONRAD, Cashier.

ILLINOIS TRUST AND SAVINGS BANK,

CHICAGO,

At the Close of Business June 30, 1884.

RESOURCES.

United States bonds at par		$500,350 00	
Premiums on same		29,881 52	
			$530,231 52
(Market value of above)	$589,418 25		
Other bonds		512,250 00	
Premiums on same		34,074 50	546,324 50
Real estate			33,754 44
Cash and exchange			437,184 31
Loans on demand		920,083 10	
Loans on time		756,215 80	
Loans on real estate		411,379 41	2,087,678 31
			$3,635,173 08

LIABILITIES.

Capital stock	$500,000 00	
Surplus fund	50,000 00	
		550,000 00
Undivided profits		62,866 73
Due depositors		3,022,306 35
		$3,635,173 08

JOHN J. MITCHELL, President. JAS. S. GIBBS, Cashier.

THE DROVERS' NATIONAL BANK

OF UNION STOCK YARDS.

SEPTEMBER 30, 1884.

RESOURCES.

Loans and discounts	$137,804 82
Overdrafts	5,184 32
U. S. bonds to secure circulation	31,000 00
Due from approved reserve agents	31,244 60
Due from other National banks	42,779 50
Due from State banks and bankers	4,092 63
Real estate, furniture and fixtures	10,000 00
Current expenses and taxes paid	2,647 96
Premiums paid	1,000 00
Checks and other cash items	438 55
Bills of other banks	3,039 00
Fractional paper currency, nickels and pennies	12 62
Specie	582 60
Legal-tender notes	8,000 00
Redemption fund with U. S. Treasurer (5 per cent of circulation)	1,395 00
Total	$279,221 60

LIABILITIES.

Capital stock paid in	$100,000 00
Undivided profits	14,784 85
National bank notes outstanding	27,900 00
Individual deposits subject to check	92,651 79
Demand certificates of deposit	11,308 30
Due to other National banks	15,580 57
Due to State banks and bankers	16,996 09
Total	$279,221 60

S. BRINTNALL, President. W. H. BRINTNALL, Cashier.

BANK OF MONTREAL.

Capital $12,000,000
Surplus 5,000,000

HEAD OFFICE,
MONTREAL, CANADA.

CHICAGO BRANCH,
WM. MUNRO, Manager.

CANADIAN BANK OF COMMERCE.

Capital $6,000,000
Surplus 2,000,000

HEAD OFFICE,
TORONTO, CANADA.
HON. WM. MCMASTER, Pres.
W. H. ANDERSON, Gen. Manager.

CHICAGO BRANCH,
A. L. DE WAR, Agent

BANK OF BRITISH NORTH AMERICA.

Paid up Capital £1,000,000
Or $4,866,666
Surplus 981,129

HEAD OFFICES,
LONDON, ENGLAND.
MONTREAL, CANADA.
R. R. GRINLEY, Gen. Manager, residence, Montreal, Canada.

CHICAGO BRANCH,
H. M. BREEDON, Agent.

PRESTON, KEAN & CO.

On the 12th of May, 1884, the firm of Preston, Kean & Co., one of the most important private banking houses in the country, completed the organization of the Metropolitan National Bank, and transferred their deposit accounts to that institution. This change has enabled them to give undivided attention to the security department of their business. The house was established in 1860, by Mr. S. A. Kean, and is consequently just about a quarter of a century old. During this long period they passed safely through the various panics and times of serious depression in business affairs, as well as through the great fire, without suffering any loss beyond the distruction of their office furniture. Some idea of the great extent of their business and the confidence reposed in them is shown in the fact that the individual deposits with the concern amounted at one time to $2,500,000. They were connected with the first government loan issued for the prosecution of the recent civil war. At the time of the rebuilding of the city of Chicago, they took large quantities of city and other securities, and by placing loans, bonds and other evidences of debt, they took an active part and lent valuable assistance in this good work.

The firm is probably the oldest one in the West in the line of investment securities; in this department they handle Government, State, City, County and School Bonds, often taking the entire issue of bonds by cities and counties for the building of court-houses, school-houses, bridges and other local improvements. They have for some years made a specialty of Chicago Car Trusts, which certificates draw six per cent interest, payable quarterly. These, with leading railroad bonds and other choice investment securities, are handled largely by them.

During the whole of this long and successful financial career the interests of the house have been under the care of Mr. S. A. Kean, and the intimate knowledge and experience acquired during that period have afforded them the most ample facilities for serving the interests of investors.

SAFETY DEPOSIT COMPANIES.

If the first great aim and effort of this generation is to amass a fortune, or at least an independence, the next most important problem is how to preserve a competency once acquired. In the highly complicated business methods of the age, the ownership of fabulous sums is often evidenced by titles, bonds, or slips of paper, which may be carried in the pocket, the loss or destruction of which would be sometimes irremediable. In days when wealth lay almost exclusively in realty, the chief concern of the great proprietor was to protect his property from the open assault of an adversary, by means of a mooted castle and a legion of mailed retainers; his only apprehension was from the aggression of superior numbers.

To-day, however, all this is changed, and wealth is threatened from so many channels that it is scarcely less difficult to preserve than to acquire.

Of these, the most dreaded and insiduous are fire and burglary, and to combat them successfully has heretofore required the most watchful and unremitting vigilance. A common office safe in a building of ordinary construction is now recognized as no serious obstacle to the ingenuity of crime, or the insatiable violence of fire, and the daring of the one or the havoc of the other too frequently, in a single night, renders of no avail the labor of a life, and transforms affluence into penury.

Nor is this the only danger which attends the possession

of wealth, for over the heads of the fortunate is ever impending the fear of midnight raids or violence and death, the burden of unremitting responsibility, and the haunting remembrance that the custody of valuables is a perpetual menace to the lives of loved ones: "Give me neither poverty nor riches" came more sincerely from the hearts of men in days when to be poor was to be the foot-ball of fortune and to be rich was to be dogged through life by greed and crime.

But now in Chicago and other centers of civilized life wealth may purchase absolute protection and an entire freedom from responsibility, and this is unquestionably the greatest advance in this direction achieved during the present century. This is accomplished through the various safe deposit companies, chartered corporations with capital sufficient to guarantee the depositor against all loss, and who in the construction of their vaults have spared no expense, and called into requisition the best scientific and mechanical skill in the world.

Following will be found a detailed account of these institutions in Chicago:

THE NATIONAL SAFE DEPOSIT COMPANY.

The National Safe Deposit Company, with its fire and burglar proof vaults, possesses all the necessary appurtenances for the prompt, convenient and safe transactions of this business—*a structure unsurpassed in character and completeness by any building for a similar purpose in the country*, rents safes in its vaults, with combination locks, or locks that can be opened only with the keys held by the renters; receives for safe-keeping, under guarantee, *valuables of all descriptions*, such as Coupons, Registered and

other Bonds, Certificates of Stock, Deeds, Mortgages, Wills, Coin, Plate, Jewelry; also, Clothing and other personal effects—*assuming the fullest liability imposed by law.*

Safes of all desirable sizes, built inside of the *absolutely Fire and Burglar Proof Vaults* of this Company, are rented at $5 to $50 each per annum. The largest safes have Combination Locks.

The vaults are lighted with the Western Edison Incandescent Light. The locks to these Safes are all different, and are changed with every change of renter. Each Safe has within it one or more Tin Boxes or Cases, in which to place the valuables deposited, under lock and key, held by the renter. These Boxes or Cases are not to be opened within the vault, but must be removed to an adjoining room, fitted up with desks, screens, etc., where the owner, in perfect seclusion and privacy, can examine his securities, cut off coupons, etc.

A renter wishing to visit his safe must be identified by the Safe-keeper, who will always accompany him into the Vault. Any renter may, at his option, appoint a deputy to act in his stead; but in case of his death, no one but his legal representative. duly authorized, can be permitted to have access to his safe—in order that the interests of heirs may be completely protected.

For the accommodation of Ladies who may become Safe-renters, special provision is made; and separate apartments are fitted up for their exclusive use, with toilet room adjoining.

Special accommodations are also provided for committees and officers of Insurance Companies and other corporations, whereby an examination of securities can be made without the trouble and risk of removing the same from the Deposit Vaults to and from their offices.

A married woman may make a deposit in her own name,

deliverable to herself only, or otherwise, as she may direct. A full record is made on the books of the company, giving a description in detail of each deposit, and a certificate is given containing a similar description of the items deposited. This Certificate must be presented on application for the withdrawal of any part of the deposit.

Strangers visiting the city and having in their possession money or valuables, will find it to their advantage to deposit the same for safe-keeping with this company.

Residents in the country or surrounding cities, having no safe deposit facilities, wishing to deposit bonds or valuables with this Company, may send them through any reliable Express Company, who will be responsible for their safe delivery, and obtain a certificate of deposit for the same as may be directed. Correspondence on this subject is solicited, and the most explicit information will be given. It is a well-known fact that the loss of such securities as Coupon Bonds is irreparable; they can not be replaced. No recourse can be had against the party issuing them, any more than for lost bank-notes. If stolen and sold, the law will protect the innocent holder in possession.

In Registered Securities, even, the owner is almost invariably put to considerable trouble, delay and expense, and in addition required to file a bond of indemnity, with approved sureties, before recovering.

First, of one large, thoroughly fire-proof room, surrounded by walls of heavy masonry, and roofed by corrugated arches, heavily covered with cement, which rest upon numerous columns of sufficient strength to support a "mountain's weight." The size of this stronghold is 30x54 feet, and is devoted to the storage of plate, pictures, trunks of value, and all other valuable property needing protection against fire and thieves.

Second, two large vaults, each 10x28 feet in size. The

walls of these vaults are of hard masonry, three feet thick. They rest upon solid foundations, which reach to depths below; are both lined with 2½ inches of steel and iron, so tempered and put together as to defy drill and chisel. In addition, the top is protected by a double course of railroad iron bars, over which again strong arches of brick and iron spread their protecting arms.

Each vault is provided with two doors of solid welded iron and hardened steel plates, aggregating seven inches in thickness, each door being protected by two combination locks of the finest character. They are further guarded by the new chronometer or Time Locks. These are placed on the inside of the doors and act automatically, locking the bolts the moment the doors are closed, rendering it impossible for any one (however well acquainted with the combination locks) to open the doors until business hours the following day.

The main entrance to the Safe Depository is from Dearborn Street, just north of the large main entrance to the building above. On entering the street door, one finds himself confronted by a strongly-grated barrier, which an attendant will open to the properly qualified visitor only. An entrance from the bank floor above is similarly guarded.

It would be impossible for the most inventive genius to devise more effectual means for guarding securities and valuables from fire and thieves than are furnished in the building, vaults, and police regulations of this Company.

The unparalleled increase of burglary and theft, and the skill, ingenuity and success with which they are now pursued, render the absolute security provided by this Company a prime necessity of modern times.

The officers are F. D, Gray, President; Lyman J. Gage, Treasurer, and O. D. Ranney, Superintendent.

THE COMMERCIAL SAFETY DEPOSIT COMPANY.

The Commercial Safety Deposit Company was organized to meet a growing public necessity, by providing an absolutely safe deposit for valuables, and as it is confined by its charter solely to this business, it can not be regarded as an appendage to other interests.

Its fire and burglar proof vaults are centrally located at the corner of Dearborn and Monroe streets, rest on eight feet of granite, and are so walled and roofed by steel, concrete, stone and brick, as to render them as nearly fire and burglar proof as the ingenuity of man can make them.

The "strong room" is guarded by the heaviest metal doors ever made; are double and doubly secured with combination and chronometer locks. The apartment is thirty feet square, and contains ten thousand separate safes for the use of renters, under their absolute control, and accessible only to them or their duly appointed deputies. These safes are also double locked, one key or combination being given to the renter, and the other remaining with the custodian of the vaults, who must personally recognize the renter before assisting him to open his safe; thus securing absolute privacy of papers, together with absolute safety.

Besides the "strong room," there are other apartments in which the renter can examine his papers or securities in perfect seclusion, or transact such business as he may find desirable, and these advantages, we may add, are all obtainable for $5 a year and upwards.

The company embraces among its officers and directors some of the most prominent capitalists in the West, having at its head Mr. George C. Otis, and Messrs. F. S. Eames, I. Foster Rhodes and Samuel Powell for Treasurer, Secretary and Manager, while in addition to these the corps of d rectors includes such well-known names as C. B. King, N. K. Fairbank, James W. Ferry and W. K. Nixon.

THE MERCHANTS' SAFE DEPOSIT COMPANY.

The Merchants' Safe Deposit Company, which is in the same building with the Merchants' National Bank, affords the most perfect security for valuables of every description, surpassing for absolute safety any on this continent. The vaults are built on four and one half feet of solid masonry, and protected by a seven inch steel casing, which envelops the whole place. For massiveness and strength, these vaults are unsurpassed, while they are further secured by double combination and the latest improved time locks, and guarded by vigilant armed watchmen, day and night. The safes are rented by the company at prices that make them easily available to all who have valuables of any nature that they wish to place in a secure place; the rent varying according to the size of the safe required, from $5 per annum upwards. The company has also great facilities for the storage of trunks, packages of silver, paintings, etc.

The officers of the company are C. B. Blair, President, and C. J. Blair, Treasurer.

THE FIDELITY SAFE DEPOSIT COMPANY.

The pioneer of the safe deposit companies now doing bnsiness in this city is the Fidelity, located at No. 143 Randolph street.

It was established in June, 1871, and was fairly started with a paying number of depositors at the time of the great fire, October 9th, 1871. Then it proved its value; while other vaults, long looked upon as the most secure, were either entirely destroyed or so much damaged as to allow their contents to be ruined, the valuables entrusted to the care of the Fidelity were protected in its vaults without the loss of a single article, proving that their construction was based upon sound scientific principles. Nor is fire the only

destroying element against which they guard; the insidious bank robber and burglar may open safes, in fact safe manufacturers are willing to admit that they are unable to keep much in advance of these light fingered gentry in the construction of absolutely burglar proof safes, but the Fidelity Safe Deposit Co.'s vaults cannot be robbed. The walls are constructed of brick (a material which, unlike iron or stone, will withstand the fircest flames) while interbuilded are six steel plates, each protected by air chambers, and absolutely impenetrable; the doors are among the heaviest ever constructed, with the most improved locks, both time and combination. While night and day armed custodians constantly guard and protect the property of their clients.

Even in case the city were given over to the mercies of a mob, the vaults would withstand all attacks for such a period as would insure its suppression, even if it were necessary to summon a force from either border of the continent.

The Fidelity is largely patronized by professional men, merchants and others, also a number of ladies, who find at its rooms a safe and convenient opportunity to transact business involving the handling of large sums of money or securities of value.

Its safes rent at from $5 to $50 per year, according to size and location, all being equally well protected, but some being of more easy access by the depositor.

It has a special vault for the storage of trunks, pictures, silverware, and other bulky and valuable articles.

The officers of the company are Matthew Laflin, President; Van H. Higgins, Treasurer; both among our best known capitalists, and men who have done much to build up many of the financial institutions of our city; Robert Boyd, Manager, to whose supervision the practical management of the business is entrusted.

REAL ESTATE.

"What a beneficent provision of Providence," said a gentleman celebrated among other things for getting the cart before the horse, "that noble rivers should always flow through the greatest cities." That this, however, is all but universally the case, will readily be seen by a glance at the map. Nevertheless, the instances are few indeed in which the site of a city has been deliberately chosen with forethought of its needs and confidence in its ultimate destiny.

Night falls upon a pioneer, and he pitches his tent by the edge of a crystal brook; winter overtakes him, and he builds the first rude cabin on the banks of an impassable river; a block-house rises where the mouth of a stream offers harbor for tiny crafts, and how little the settler dreams that he has laid the corner stone of a mighty city. Yet railroads meet and cross upon the boundless prairies, the breast of the broad river bears the produce of empires to the markets of the world, and the fort by the inland ocean becomes the center of commercial activity, the nucleus of an unforeseen metropolis, the goal of a thousand channels of traffic, the great throbbing heart of a continent.

Thus it has ever been. Men call it chance, this chain of cause and effect which plants a village in one place rather than another; yet with a clearer appreciation of the laws which control its growth, they ascribe to rightful causes the development of the city from the town. "But why," say others, "did no one foresee the future greatness of Chicago?

Even in early days capital came here seeking investment only to return to the foot of the lake, or push on further westward." The answer to this is, that such foresight could only have been based on a more exact geographical knowledge of the country than any one at that time possessed; the fertility of the soil, the vastness of its productive area, the course of rivers, and the trend of mountain barriers, with their influence on future railway lines. It would have involved a knowledge of the phenomenal development of our country which has amazed the most sanguine, and added a new chapter to the possibility of National growth; it would have involved an appreciation of the causes which have conspired to pour the millions of Europe upon our shores.

Then too, some of the far-sighted settlers of Chicago had even in early days dim visions of its destiny. Men ridiculed the faith which led them over a thousand miles of wilderness, to invest the limited capital of that period in a low-lying, unproductive, Indian haunted swamp; but who in those years could conceive the tremendous vigor of Chicago enterprise which has drained the marsh, built even the ground on which to rear her marble palaces, and along miles of shore pushed back the billows of the tossing lake.

This has been the record of fifty years; this has been accomplished while the old world capitals have gained or lost some petty thousands in population. Little wonder that thoughtful foreigners come to our country with Niagara and Chicago as their prime objective points—the boiling channel through which one chain of land-locked oceans seek the sea; the gate through which a million miles of prairie pour their products upon the markets of the world.

But further retrospection would be idle; the mission of Chicago is no longer problematical, it has become a matter of history; the question for our consideration now is not the origin or causes of her progress in the past, but the ultimate limits of her future growth.

The rise in the value of real estate has hitherto been unparalleled. Is there reason to anticipate a continued advance? Are colossal fortunes still awaiting the shrewd investor in city and suburban lands?

In the first place, Chicago is adding to her population at a rate which has already rendered the census returns of 1880 a third too small; new industries are continually springing up, or are attracted hither from the less progressive cities, while every year extends the area of country from which our city draws support, and adds new channels of communication to her vast confluence of railway lines.

The business center of Chicago, now occupied by the principal mercantile houses of this city, rebuilt since the fire in the most elaborate, convenient and artistic manner, has gained for itself a widespread reputation, and should be classed as belonging to the most substantial and profitable realty of the United States. When men from New York, Massachusetts, Pennsylvania and other Eastern States come here to invest their unemployed capital, it speaks loudly in favor of this wonderful center of commerce, and indicates its superiority as a place of investment over the older Eastern cities. A consideration of the rental of some of our largest business blocks will show an annual return of from eight to ten per cent on a fair valuation now of the property occupied.

Chicago real estate has proven during the past thirty years, as compared with all other subjects of investment or places of deposit, the best, and ultimately the safest. This assertion will commend itself to the minds of all who think calmly of the utter and entire loss, without any resulting benefit to anyone else, sustained by so many who, during that period of time have been dealing in stocks, bonds, merchandise, shipping, manufacturing, and other business, which it is possible to wipe out and destroy, leaving nothing

at all to show for their original investment, or to rise again as real estate always does, no matter how low it may go in dark times. In other words, the material or subject matter in which a real estate investor places his money is not capable of utter destruction, and hence its value can never be wholly destroyed.

As a rule real estate does advance in value. The natural growth of all towns and cities does pay at least a moderate interest in the advance of the value of the real property, especially that not immediately in the centers of them, where, as the towns or cities increase in size, the property changes from its acre value to the lot or foot value, while that centrally located has, during the time spoken of, been paying annually a revenue greater or less, according to circumstances. No rule can be given as to which is the better investment, central or marginal property. Experience varies in individual cases, hence opinions differ. Scarcely any better illustration can be given of the adage as to the payment of your money and the taking of your choice.

The record of the past year has been unprecedented in the history of cities. Not even the year following the great fire, when the entire energy of the stricken city was devoted to rebuilding, can compare with the phenomenal activity of 1883. Suburbs were pushed out in every direction; the prairie has been sprinkled with beautiful villages, and traversed by belt and railway lines, and so great an impetus has been given to building, that it is only the possibility of indefinite expansion, and the thousands of acres of circumjacent lands equally good, and save for the increased distance from the business center, equally desirable, which has kept the price of unimproved realty down to its present reasonable and relatively low figure.

The plain, unvarnished statement that during the year just past, 86,000 feet of street and avenue frontage were

covered with buildings, seems almost incredible, yet such is the fact; 3,204 permits for structures valued at $22,000,000, palatial homes, suburban villas, huge manufactories, and magnificent business blocks ten and eleven stories in height, have risen as by the magic of Aladdin's lamp, and this advance has been made, in spite of the widely prevalent and persistent bricklayers' strike, by which contractors were terribly hampered in the early part of the year, A glance at the statistics shows that the great West Division of the city, the home of the people, has gained more roofs than both the North and South Divisions combined. The aggregate of transfers in building lots has also been largely in excess of former years, while the transactions involving acres have proved a surprise to the best informed. That these sales show a continuous advance on the prices of the year before, is of course in the nature of things, and in accordance with the development of the city, by which the farms of five years ago have been dotted with cottages, and the suburbs of to-day will be covered with business blocks within another half decade.

The monthly installment plan has of late become popular with the masses of the provident working classes, who are thus enabled to earn an attractive home with the savings which in other years barely sufficed to pay their rent in the most crowded undesirable portions of the city. Of the opportunities thus offered, the laboring classes are availing themselves so extensively as to amaze even the most sanguine projectors of the plan. By this means the villages of Moreland, Auburn, Douglas Park, Lawndale, Chicago Lawn and others, have been called into existence, and the coming season will witness the erection of as many more.

Of late the vast accumulation of material, lumber, brick and stone, has decreased the cost of building from fifteen to twenty per cent. This has of course given an impetus

to construction, while the suggestion that at no distant day action may be taken as in some European cities to limit the height of business blocks, has resulted in the securing in advance of a large number of building permits since there is a steadily growing preference among capitalists for office or business blocks as the most permanent and profitable investment. In addition to the phenomenal development of the West Division, equally marked tendencies of growth have been noted in other portions of the city. The splendid Board of Trade building now nearly completed, will infallibly shift a few blocks south the grain, produce and speculative business of the city; while the South Side, growing at the rate of a mile per year promises to become eventually the *habitat* of the wealth of Chicago.

The Chicago Real Estate Board was incorporated in 1843 by William L. Pierce, William A. Merigold and Edward A. Cummings, and has numbered about one hundred members, which includes many of our most prominent brokers and agents, and through this membership indirectly controls a large proportion of the real estate transactions of the city. Its object, as its name implies, is to provide facilities for agents to meet and discuss matters pertaining to real estate affairs, and to furnish to each other information on all points regarding real estate in Chicago; and thus afford facilities to transact business to better advantage, by uniting on matters which pertain to the common interest.

The Board has of late taken much interest in the laws regulating the assessment and collection of taxes, and is doing all in its power to establish a Board of Assessment, public in its character, and which shall assess property at a more uniform rate than is now followed.

We give the names of some of the prominent real estate firms who are members of the Board:

Barnard, M. R., 95 Clark Street.

Barnes & Parish, 157 LaSalle Street. Rents collected, estates managed and taxes paid for non-residents, real estate bought and sold in all parts of the city and country; also, farm property.

Cummings, E. A. & Co., Madison Street, corner LaSalle.

Gehr, Saml., 114 Dearborn Street; has been engaged in business here since 1853, making a specialty of placing large loans for capitalists on improved real estate in Chicago.

Goodman, Jas. B. & Co., 68 Washington Street. Dealers in city and country property, timber lands and stumpage, iron lands and iron mining options and leases.

Goodwin, Horace A., 99 Randolph Street. Real estate bought and sold on commission, estates managed, rents collected, taxes paid and special attention given to the interests of non-residents.

Hyde, A. D., 126 Dearborn Street. Makes a specialty of collecting rents, etc. for non-residents.

Hyman, R. W., Jr. & Co., 184 Dearborn Street. Real estate and loans.

Isham & Prentice, 55 Dearborn Street. Agents for the care and management of real estate.

Knight & Marshal, 97 Clark Street. Real estate, loans, renting, etc.

Lyman & Giddings, 101 Washington Street. Real estate bought and sold, mortgages negotiated and estates for non-residents carefully managed.

Mead & Coe, 149 LaSalle Street. Real Estate Agents; mortgages, loans and collections.

Morey, H. C. & Co., 85 Washington Street. Established 1852. Especial attention paid to the management of estates and property of non-residents. Mr. Morey is President of the Real Estate Board.

Pierce & Ware, 143 LaSalle Street. Refer to First National Bank.

Snow & Dickinson, 97 Washington Street. Real estate bought and sold on commission, mortgage loans effected, rents collected, estates managed, taxes paid and the interests of non-residents and local owners carefully secured. Mr. Snow was formerly of the firm of H. C. Morey & Co.; Mr. Dickinson with F. B. Peabody & Co.

Snyder, Thomas D. & Co., 87 Dearborn Street. Mr. Snyder has been engaged in business for the past thirty-one years. The firm makes a specialty of large tracts of lands suitable for the location of towns or manufacturing villages.

SUBURBAN PROPERTY.

An important feature of the real estate interest of Chicago is represented in suburban property, affording as it does special facilities for factory sites and residences, and comprising property that is yearly increasing in value with the development of the city.

FACTORY SITES.

The advantages of Chicago as a manufacturing center, render the purchase of ground for this purpose an important item in the real estate market. Mr. Nelson Thomasson is one of the prominent operators in this line, and refers to the leading bankers and financiers of Chicago. He has many large acre tracts, with railroad facilities in every direction around Chicago, on which he can locate factories of any size, and for any purpose; in many instances the land for the factory will be donated as an inducement to build. In addition to factory sites, he has a large number of factory buildings for sale at merely nominal figures. He has also boulevard and park property for residences, which afford an excellent field for investment.

TIMBER AND IRON LAND.

A large business is also transacted in Chicago in iron and timber land, although at the present time, owing to the

large over production of metal, the first named is not in active demand. Full information in regard to lands throughout the entire Northwest can be obtained here, saving the travel to different parts of the country, owners recognizing the advantages of having their lands placed for sale in this financial center.

James B. Goodman & Co. deal largely in this class of property, and in addition to their Chicago offices, have agents at every point throughout the iron and timber section of the West, thus keeping them fully posted as to all lands of this class placed in the market for sale.

SUBURBAN LOTS WITH CITY FACILITIES.

Chicago's nearest suburb is the property of the West Chicago Land Co., and adjoins the western city limits, lying between Madison and Kinzie streets, just west of Central Park. The Madison street horse cars run to it. The Western Dummy Railroad runs through it, and the Galena division of the Chicago & Northwestern Railroad, running twenty trains daily, has two stations upon it. The Western Indiana Belt Line Railroad also runs through it.

Being outside the city limits, wooden houses are permitted. Fifty houses were built there in 1883. The large range of this subdivision affords property suitable for high or low priced residences, mercantile business, and for manufacturing. The property is handled by M. A. Farr, agent, 68 Washington street.

CUYLER.

Cuyler, situated on the Northwestern Railway, where a new depot has just been constructed at a cost of $2,000, built by owners of real estate in that vicinity, is one of Chicago's most healthy suburbs. It is in close proximity to Graceland where is situated the celebrated Graceland

Cemetery and the High School. It enjoys the very decided advantage of being of easy access to the city, by both steam and horse-cars, and is rapidly growing into popular favor. Among the larger property owners is Mr. Bryan Lathrop, President of the Graceland Cemetery Co., who has charge of that company's property at Graceland, which is coming into demand for residences, and who also has charge of 150 acres at River Forest, belonging to Mr. J. H. Lathrop. About forty sales have been made for actual improvement, and as soon as the water-pipe sewers are completed houses will be erected.

The advantages of the lake front as residence property, can not be over-estimated, it being in contradistinction to the south of Chicago, high, dry, and healthy.

CHICAGO LAWN.

Chicago Lawn, as a residence section, is surpassed by none. It lies to the southwest from the city proper, on the Chicago & Grand Trunk R. R., at 63d street. This location secures for it a pure air, uncontaminated by the smoke and exhalations from the great city, for the reason that the prevailing winds in summer are from the southwest. This advantage with many home seekers will be decisive. It lies quite high, with excellent drainage in two directions; streets are already graded, trees planted, and sidewalks built. Good schools and churches are easily accessible, and a special "church train" is run every Sunday to Chicago. It has an excellent soil for gardens, and is already occupied by many American families. Society is already established, and social intercourse provided for by literary and musical societies. Titles are simply perfect, with no danger of subsequent cloud or shadow arising to invalidate them. Above all things, lots are cheap; so cheap that they offer one of the best opportunities in the West for permanent investment. Lots are sold for $200, and they can be paid

for in $5 monthly payments. The principal owner of lots is Mr. John F. Eberhart, the well known real estate dealer, at 161 LaSalle street, Room 75.

FERNWOOD.

Fernwood, eleven miles south of Chicago, is one of our most accessible, as well as desirable, residence suburbs, situated in close proximity to three railway lines, the Chicago & Eastern Indiana, the Rock Island, and the Pan Handle; commutation fares have been kept down to a minimum rate, and every facility is offered for speedy transportation.

Great improvements have been made in the past two years; forty-three houses have been built; Tracy avenue, the leading thoroughfare, has been paved, and street cars will shortly be introduced; add to this good schools and churches, and it will readily be seen that Fernwood is most desirable as a residence suburb, and also offers unexceptional facilities to capitalists seeking for sites for manufacturing purposes. The subdivision was made by Mr. E. L. Gillette, with whom is associated as agent Mr. S. Montgomery Smith, the city office being located at 142 Dearbon street.

This property was among the first to be put upon the market on the installment plan, by which a man can purchase a home for from $1,250 to $2,500, and pay for it in monthly payments, not more than would be required ordinarily by owners for rent of similar premises; which plan has proved a decided success, and considerable property still remains at Fernwood, to be disposed of on the same terms.

HAMMOND.

Hammond is a typical manufacturing town of the celebrated Calumet region, situated twenty miles from Chicago, on the Calumet River.

Its growth is phenomenal, as will be seen by the following comparative tables:

	1870.	1883.
Population	25	3,300
Capital invested for business purposes	$5,000	$2,218,000
Number of dwellings	6	564
Value	$2,000	$ 665,000
Value of manufactured product		$20,000,000

The river is now being improved to a point one-half mile east of Hammond, the principal obstructions, which will be wholly removed being below Hammond, at which point the river is deep, the channel is wide, and the banks receding, affording a most excellent harbor, with superior facilities for building docks, of which about 1,000 feet have been constructed, and more is in process of completion.

Hammond is on the line of the following roads:

Chicago & Atlantic, New York, Chicago & St. Louis, Louisville, New Albany & Chicago, Michigan Central, and the Western Indiana Belt Line, thus affording an opportunity for the shipment of manufactured products, unsurpassed by any other settlement in the Calumet district, and giving direct communication with all the large coal mining sections of the country.

The land is high, dry, and with a sandy soil that greatly facilitates building.

The government of the town has been conducted on an exclusively economical scale; as a consequence assessments are few and taxes small. The following large establishments are located there:

Geo. H. Hammond & Co., shippers of fresh beef and packers.

Tuttle Spring Co., wagon and carriage springs.

M. M. Towle Distilling Co.

Hammond Lumber Co.

Stein, Hirsh & Co., manufacturing chemists.

This concern was established twenty years ago and has also a large factory in the city of Chicago.

They are manufacturers of albumens, starch, gum, dextrin and agricultural chemicals. A considerable portion of their manufactured product is exported.

Mr. James N. Young, 79 Dearborn street, is largely interested in Hammond real estate, and corporations or individuals desirous of locating in the neighborhood of Chicago, can obtain from him the fullest information as to the most elegible sites.

D. L. Morgan is engaged in the real estate business at Hammond; he has large tracts of land for sale and is particularly interested in selling residence sites. These he disposes of on the popular installment plan, so that by the payment of an amount not exceeding the rental of a comfortable house, a person may soon be the owner of a pleasant and healthfully located home of his own.

EVANSTON.

Evanston is undoubtedly the most charming suburb fo Chicago, for here is combined the quiet and repose of the country, with most of the advantages to be derived from a residence in the city.

Situated but twelve miles from the city on the Northwestern Railway, it is reached in about the same length of time as is required to travel from the central or business portion of the city to the outskirts by street cars, and with unexcelled railway accommodations–running twenty trains per day each way–comutation rates, $6.50 per month, and with a new line about completed, which will be opened for travel in the spring, it is little wonder that it has so increased in population, that it is to-day counted the wealthiest suburb on the Northwestern Railroad. There are no manufacturies in its limits with their attendant smoke, noise and bustle, but its streets are carefully laid out, with a superior sewerage system that defies malaria and the other endless ills of

suburban towns. Sidewalks are laid, along which are planted thrifty shade trees, while water and gas pipes supply the inhabitants with those necessities. The associations of the town are such as to attract only the better class of residents, the consequence of which is that the inhabitants are a moral and prosperous community, most of whom own their own homes, and rum drinking and its attendant evils are banished. No liquor is allowed to be sold in the village, and its taxes are comparatively low.

Here is located the great Northwestern University, the largest theological seminary in the West; a dozen or more churches, a bank, good schools, first-class stores, and two excellent hotels.

The Avenue House, on the main street, which was built by Dr. Charles H. Quinlan, and is managed by Quinlan Brothers, has a frontage of two hundred and eighty feet, and contains over one hundred rooms, affording at all seasons of the year the very best accommodations for guests, and during the summer months offering a pleasant, healthful and accessible home for many Chicago families.

All who are interested in Evanston property, and who desire to obtain the fullest information regarding it, should call on or correspond with Mr. John Culver, No. 87 Washington street, Chicago.

WASHINGTON PARK CLUB.

The Washington Park Club was organized in January, 1883, having for its objects the providing of a club house and pleasure grounds for the entertainment of its members, where at all times they may meet for social intercourse; and further to encourage, by providing the proper facilities, raising, improving, breeding, training and exhibiting horses at meetings to be held at stated times each year. How well and successfully the intentions of the promoters of the association have been carried out, is demonstrated to-day in its possession of the most beautiful park, most elegant club house, and the finest racing track in America.

The organization of this club marked an important epoch in the turf annals of Chicago, bringing, as it does, into direct and active connection with the management of racing matters, a class of gentlemen who have never heretofore been prominently identified with turf sports. It is with the turf as it is with politics; if its character is to be improved, men of high character and standing must take hold of it, and not merely stand back and deprecate its shortcomings. To show that the future of high-class turf sports in Chicago is in good and safe hands, we have only to point to the following list of stockholders and officers, among whom will be found gentlemen of national reputation in military, commercial and social circles:

THE STOCKHOLDERS.

Ackerman, William K.
Allen, Charles W.
Allerton, Samuel W.
Alexander, Elijah S.
Allbright, William B.
Andrews, William B.
Baker, William T.
Barker, Samuel B.
Barnes, Charles J.
Beman, Solon S.
Bigelow, Anson A.
Blair, Lyman.
Blair, Watson F.
Borden, William.
Bowles, Joseph B.
Boynton, Wallace W.
Brega, Charles W.
Brewster, John E.
Bullen, George.
Bullen, William H.
Burke, Michael.
Cary, Eugene.
Christoph, Henry J.
Chumasero, John T.
Clapp, Ozro W.
Cooley, Henry H.
Cole, Cyrus E.
Comstock, William C.
Converse, Amasa R.
Cratty, Thomas.
Crawford, Andrew.
Cudahy, John.
Cudahy, Michael.
Cummings, Columbus R.
Cummings, Robert.
Davis, Richard L.
Dexter, Wirt.
Doane, John W.
Dodge, George E. P.
Dunham, Ransom W.
Dupee, Horace M.
Dupee, John, Jr.
Dwight, John H.
Kent, Sidney A.
Kern, Charles.
Kimball, William W.
Kirkwood, Thomas S.
Kirkwood, William.
Laflin, George H.
Leiter, Levi Z.
Leith, Alexander J.
Lester, John T.
Linn, William R.
Linn, Winfield S.
Love, James M.
Lyon, John B.
Macfarland, Henry J.
Mair, Charles A.
Marks, Clarence W.
Marsh, Eben J.
McAvoy, John H.
Meeker, Arthur B.
Merrick, Levi C.
Moulton, Byron P.
Munger, Albert A.
Murdoch, Thomas.
Nelson, Ephriam.
Nelson, Murry.
Nichols, Melville S.
Norton, J. Henry.
Oakley, James W.
Palmer, Potter.
Parkes, John C.
Peasley, James C.
Pickering, Albert D.
Pickering, Philander.
Pullman, George M.
Ream, Norman B.
Rew Henry C.
Richards, Joseph R.
Roche, Owen H.
Roloson, Robert W.
Rozet, George H.
Rust, Henry A.
Ryerson, Martin.
Ryerson, Martin A.

THE STOCKHOLDERS.

Eames, Frederick S.
Eldredge, Isaac.
Ellsworth, James W.
Fairbank, Nathaniel K.
Field, Marshall.
Fisher, Archie J.
Fisher, James K.
Fisher, Lucius G., Jr.
Foreman, Henry G.
Gage, Albert S.
Gage, Eliphalet B.
Geddes, Alexander.
Getty, Henry H.
Gillette, James F.
Glass, Victor K.
Goodman, James B.
Gore, George P.
Grannis, William C. D.
Hamill, Charles D.
Harding, George F.
Harvey, Joel D.
Hayden, Albert.
Henderson, Charles M.
Henderson, Wilbur S.
Hesing, Washington.
Hibbard, William G.
Hoffman, George W.
Holmes, Ira.
Howe, Charles T.
Howard, William B.
Hull, Morton B.
Hunt, James A.
Huston, Albert C.
Hutchinson, Charles.
Ingraham, Granville S.
Irwin, David W.
Jeffery, John B.
Jenks, Anson B.
Jones, Nathaniel S.
Sackett, Edward B.
Sears, Joseph.
Seipp, William C.
Schwartz, Charles.
Sheridan, P. H., Lieut. Gen.
Sherman, Frank T.
Singer, Charles J.
Smith, Byron L.
Smith, George.
Smith, Peter.
Spalding, Jesse.
Spalding, Samuel G.
Spruance, Harmon.
Stager, Anson.
Stauffer, Benjamin F.
Stearns, Marcus C.
Stinson, James.
Sweet, Samuel H.
Tabor, Ernest W.
Thompson, Corwin C.
Tufts, Eugene L.
Ullman, Daniel.
Van Inwagen, James.
Waixel, Isaac.
Walsh, John R.
Walker, Wirt D.
Warren, Robert.
Warner, Henry D.
Washburn, Edward S.
Watson, Amasa B.
Wells, Moses D.
Wells, Thomas E.
Wheeler, George H.
Wheeler, Hiram.
White, Charles B.
Wilmarth, Henry M.
Wolford, Jacob A.
Yerkes, Charles T., Jr.
Young, Otto.

OFFICERS OF THE CLUB.

LIEUT. GEN. P. H. SHERIDAN, President.
NATHANIEL K. FAIRBANK, Vice President.
SAMUEL W. ALLERTON, " "
JOHN W. DOANE, " "
ALBERT S. GAGE, " "
JOHN R. WALSH, Treasurer.
JOHN E. BREWSTER, Secretary.

BOARD OF DIRECTORS.

Lieut. Gen. P. H. Sheridan.	John Dupee, Jr.
Nathaniel K. Fairbank.	George H. Rozet.
Samuel W. Allerton.	Thomas Cratty,
Columbus R. Cummings.	Charles Schwartz.
John R. Walsh.	Watson F. Blair.
Albert S. Gage.	Potter Palmer.
Henry J. Macfarland.	Martin A. Ryerson.
Morton B. Hull.	John H. Dwight.
John W. Doane.	Samuel H. Sweet.
Anson Stager.	George H. Wheeler.
James Van Inwagen.	Charles B. White.
Charles D. Hamill.	John E. Brewster.

The club's property consists of eighty acres, bounded on the north by Sixty-first street, on the east by Cottage Grove avenue, on the south by Sixty-third street, and on the west by South Park avenue. Lying, as it does, midway between Woodlawn and Englewood, it is accessible by the Illinois Central Railroad, Pittsburgh & Fort Wayne Railroad, Michigan Southern Railroad, and Chicago & Rock Island Railroad, besides from its contiguity to West South Park by both Grand and Drexel boulevards, and the Hyde Park street railway. The land has a gentle, natural slope from the east and north, twelve feet above city datum in elevation to the west and south, allowing a feature acceptable to all turfmen, viz: A track of gentle up and down grade, which is considered faster than a dead-level run. The grand stand is back from the course a hundred feet, and combines in its completeness the sloping lawn features so popular at Sheeps-

head Bay and the commodious appointments of Jerome Park, together with its basement privileges. Perfect accommodation for turfmen is afforded—stables of the most approved style, thoroughly drained and ventilated. For the members commodious sheds; for the public a park that combines all the best features of the accepted racing centers of the United States. The management has considered rapid and complete surface drainage first, and all else has to subserve that most important end. The track has many of the features of the popular Saratoga course, although wider, and having on the same grounds a practice track, resembling in that respect the course at Louisville. The home and back stretches have a length of 1,414 feet, the turns 1,226 feet, thus affording longer straight runs than the stereotyped method of having stretches and turns of equal length. The widths are: Home-stretch, 85 feet; backstretch, 70 feet; turns, 65 feet. Immediately inside of the course proper, and separated from it by a ten-foot drainage sod space, is the practice track, forty feet in width, which is constructed with the same care as the track itself.

In three-quarter mile dashes it has formerly been an objection that the horses were started on the mile course at too great a distance from spectators. To obviate this is a diagonal "shoot" similar to that at Saratoga, which allows a start near the wire, and directly in front of the grand stand and club house.

The steeplechase has been so arranged that the water-jumps occur over natural lake-necks, a feature unknown on any course in this country. The awkward artificial water-jumps now in vogue are not only unnatural in appearance, but do not acquaint the horse with the presence of water until at its brink. The property is inclosed with a partially open fence, which, in a measure, foreshadows the liberal policy of the club, affording, as it does, an opportunity for the passing public to enjoy the beauty of its grounds.

The stables are of peculiar interest to horse owners, and a mention of some of the important improvements made in this direction will be found of interest. There are 500 stalls, each 12x14 feet in size, and 10 feet high in the clear; the stalls are grouped variously from five to thirty under one roof, so that exclusive accommodation can be furnished according to the number of horses to be provided for. Especial care is taken to render these stables in the highest degree healthful and convenient. The highest point of ground has been selected as the site of the stables, thus insuring the most thorough drainage and freedom from dampness, while each stall is ventilated by large transoms in the front and rear, and from the interior in every case is constructed a large ventilating flue opening above the roof. Hydrants yielding pure lake water are placed in front of each stable; fences divide and separate the buildings, with a liberal allowance of ground set apart for each, and a porch ten feet in width supplies shade and shelter. Secretary Brewster, who has made a close study of this feature of race track equipment upon every prominent course in America, has given especial attention to the Washington Park stabling, and is determined that in respect of comfort and healthfulness to the valuable horses quartered therein these stables shall far surpass anything known in the country.

The club house itself is a beautiful structure, and in its architectural design and the perfection of its interior arrangements it surpasses anything of the kind that has been projected in the United States. It is 127 feet long by 75 feet deep, comprising two stories and an attic, and having a balcony 18 feet wide extending around each story; the hallways are 20 feet wide. The cafe, exclusively for the use of gentlemen, is 33 feet wide by 75 feet long, and upstairs is a magnificent room of the same dimensions used as the ladies' assembly room. There are also ladies' reception rooms and

parlors, and fourteen private sitting rooms. Fifty-six thousand dollars were expended upon the building itself, while the cost of furnishing entailed an outlay of $20,000 more.

The grand stand is a perfect structure, and affords ample seating capacity for 10,000 people. It is so arranged that each person when seated has an unobstructed view of the passing horses from their hoofs to the jockey's cap.

The gentlemen identified with the management of this club are determined to make it not alone the equal, but, so far as abundance of money and the experience and ability to use it judicially can do it, the superior of any racing park organization in America. It is proposed to do for the citizens of Chicago what the Jerome and Coney Island Clubs have done for New York and the Pimlico for Baltimore. These clubs, like the Washington, are in the hands of some of the best and most influential business men, and are managed in such manner as to furnish a fine retreat for members and their friends at all times, and give the public the very best entertainment and sport during meetings.

Chicago's importance as a racing center is now so universally recognized that an enterprise of the splendor and magnitude of the Washington Park Club will command the attention and good-will of the leading horse-owners and of the lovers of turf sports everywhere. The race meeting last June was one of the most successful ever given in this country, and the arrangements already made for the coming season warrant the assurance that it will be the most brilliant on record. The value of the stakes and the large amount of money added by the club have tempted entries from all parts of America.

GRAIN.

The day has gone by when a single city can exercise a control, permanent and exclusive, over any branch of business; economic conditions change from time to time, influences inconsiderable one year, become important factors in the next, and the prodigious development of the country, its industrial and transportation facilities, continually baffle, forecast, and revolutionize supply and demand. To this general rule there is, however, a number of important exceptions chief among which is that branch of trade which we are now considering, and the undisputed supremacy of Chicago. For this there is a reason, simple, briefly stated and convincing: that is, the vastness of its tributary area of producing lands. Thirty years ago Buffalo commanded the grain trade of the country; a little later, Toledo, a more Western out-post, received in her capacious elevators the commerce of all the lakes, while but a few years elapsed before the center of population and cultivated land, shifted towards the Mississippi Valley, leaving to still more Western cities the struggle for pre-eminence.

The world knows in whose favor this contest was soon and decisively ended; indeed it could not have been otherwise, since Chicago, lying on the shortest railway lines, and water way to the Eastern seaports, is the natural market for the broadest grain-producing territory on this continent, and has facilities for handling, storing and marketing produce, beyond all question, unequaled in the world.

During the year just past, the grain transactions in this city have been enormous, almost beyond precedent.

The receipts of flour and grain, exceeding 168,000,000 bushels, are the largest ever recorded, while the shipments, amounting to over 145,000,000 bushels, were equaled only by the phenominal out-put of 1880. Even in the smaller grains the crop returns were so large, that they were forced of necessity to seek Chicago, no other city offering adequate facilities for their storage and marketing.

In this connection, it is not easy to overestimate the influences of the Board of Trade, which was the first commercial institution in the country to establish, and apply a system of grading to cereal products. It met with such success that it has since been copied over the entire country, and in 1872 was formally adopted by the Legislature of our State, since which time its provisions have been carried out by officials acting under State authority, known as the Board of Railroad and Warehouse Commissioners. It also established rates of commission for receiving and selling grain, vastly facilitating business transactions, and the speedy adjustments of disputes, while inculcating higher principles of equity in trade.

The growth of the body from its organization in 1848, with eighty-two members, until the present day, when having reached nearly two thousand, its membership is practically restricted, is one of the most significant chapters in the history of Chicago. From its birth, in the third story of a narrow building in La Salle street, it has moved from place to place, seeking ever more commodious quarters, while it is just on the eve of entering the most magnificent structure in the world devoted to commercial purposes, have all but completed, at a cost of nearly $1,700,000.

Of late years, the grain market has proved very attractive to the speculative element of the country, and the Board of Trade plan, recently adopted, wherein it is declared to be

the intention of the contracting parties, to tender or receive the property which is the subject of the transaction, has been beneficial in checking reckless operators.

Many of the most prominent firms here have greatly enlarged their facilities for filling orders. Branch houses have been established in leading cities, and private telegraph connections with the principal Eastern and Western markets are now so common as to excite no comment, while banking facilities, and for negotiating foreign exchange, are also equal to those of any Eastern market.

The Chicago Grain Receivers' Association, is as its name implies, composed of those members of the Board of Trade who are the direct receivers of grain. It has for its object the mutual protection of its members, and the correction of such errors and abuses as may arise in the general course of trade, in which they are interested. This includes a general supervision of all rules relative to grading, warehousing, or handling in any way, by the different freight lines engaged in transporting it to and from the city. It numbers about 200 members. and is entirely distinct from the speculative element of the board. Its officers are: George M. How, President; George H. Sidwell, Vice-President; A. M. Henderson, Treasurer; H. H. Carr, Secretary.

The following table shows the total receipts and shipments of grain of all kinds for the past ten years, and flour reduced to wheat, in bushels:

	RECEIPTS.	SHIPMENTS.
1875	81,087,302	72,369,174
1876	97,735,482	87,241,306
1877	94,416,399	90,706,076
1878	134,086,595	118,675,469
1879	137,704,571	125,528,379
1880	165,855,370	154,377,115
1881	146,807,329	140,307,597
1882	126,155,483	114,864,933
1883	164,924,732	141,720,259
1884 Estimated	168,000,000	145,000,000

The following statement shows the capacity of elevator warehouses, for the storage of grain in the City of Chicago, with the rate of storage;

NAME OF ELEVATOR.	PROPRIETORS.	CAPACITY BUSHELS.
Central Elevator A	J. & E. Buckingham	1,000,000
Central Elevator B	J. & E. Buckingham	1,500,000
C. B. & Q. Elevator A	Armour, Dole & Co.	1,250,000
C. B. & Q. Elevator B	Armour, Dole & Co.	800,000
C. B. & Q. Elevator C	Armour, Dole & Co.	1,500,000
C. B. & Q. Elevator D	Armour, Dole & Co.	1,800,000
C. B. & Q. Elevator E	Armour, Dole & Co.	1,000,000
Rock Island Elevator A	Flint, Odell & Co.	1,500,000
Rock Island Elevator B	Flint, Odell & Co.	1,100,000
Galena Elevator	Munger, Wheeler & Co.	700,000
Air Line Elevator	Munger, Wheeler & Co.	700,000
Northwestern Elevator	Munger, Wheeler & Co.	500,000
Fulton Elevator	Munger, Wheeler & Co.	300,000
City Elevator	Munger, Wheeler & Co.	1,000,000
Union Elevator	Munger, Wheeler & Co.	800,000
Iowa Elevator	Munger, Wheeler & Co.	1,500,000
Saint Paul Elevator	Munger, Wheeler & Co.	900,000
Illinois River Elevator	Wm. Dickinson & Co.	175,000
National Elevator	National Elev. & Dock Co.	1,000,000
Chicago & St. Louis Elevator	Ill. Trust & Savings Bank	1,000,000
Wabash Elevator	Geo. L. Dunlap & Co.	1,500,000
Indiana Elevator	Geo. L. Dunlap & Co.	1,500,000
Neely & Hambleton's Elevator	Ill. Trust & Savings Bank	600,000
Chicago & Danville Elevator	P. D. Armour	350,000
Chicago & Pacific Elevator	Chi. & Pacific Elevator Co.	650,000
Total capacity		24,625,000

RATES OF STORAGE ON GRAIN RECEIVED IN BULK.	IN CENTS PER BUSH.
If inspected in good condition when received—	
For the first ten days, or part thereof	1¼
For each additional ten days, or part thereof	½
If condemned as unmerchantable when received—	
For the first ten days, or part thereof	2
For each additional five days, or part thereof	½

From November 15 to April 15, the above rates will be charged on Grain in good condition until four (4) cents per bushel has accrued, after which no additional storage will be charged during the time named, so long as the Grain remains in good condition.

RULES GOVERNING THE INSPECTION OF GRAIN IN THE CITY OF CHICAGO.

The following are rules adopted by the Board of Railroad and Warehouse Commissioners establishing fees and proper number and standard of grades for the inspection of grain. The same to take effect on and after the 1st day of December, 1884, in lieu of all rules on the same subject heretofore established:

RULE I.—WINTER WHEAT.

No. 1 White Winter Wheat shall be pure White Winter Wheat, or Red and White mixed, sound, plump, and well cleaned.

No. 2 White Winter Wheat shall be White Winter Wheat, or Red and White mixed, sound, and reasonably clean.

No. 3 White Winter Wheat shall include White Winter Wheat, or Red and White mixed, not clean and plump enough for No. 2, but weighing not less than fifty-four pounds to the measured bushel.

No. 4 White Winter Wheat shall include White Winter Wheat, damp, musty, or from any cause so badly damaged as to render it unfit for No. 3.

No. 1 Long Red Winter Wheat shall be pure Red Winter Wheat of the long-berried varieties; sound, plump, and well cleaned.

No. 2 Long Red Winter Wheat shall be of the same varieties as No. 1, sound and reasonably clean.

Turkish Red Winter Wheat—The grades of Nos. 1 and 2 Turkish Red Winter Wheat shall correspond with the grades of Nos. 1 and 2 Red Winter Wheat, except that they shall be of the Turkish variety.

In case of mixture of Turkish Red Winter Wheat with Red Winter Wheat it shall be graded according to the quality thereof, and classed as Turkish Wheat.

No. 1 Red Winter Wheat shall be pure Red Winter Wheat of both light and dark colors of the short-berried varieties, sound, plump, and well cleaned.

No. 2 Red Winter Wheat shall be Red Winter Wheat of both light and dark colors, sound and reasonably clean.

No. 3 Red Winter Wheat shall include Red Winter Wheat not cleaned and plump enough for No. 2, but weighing not less than fifty-four pounds to the measured bushel.

No. 4 Red Winter Wheat shall include Red Winter Wheat, damp, musty, or from any cause so badly damaged as to render it unfit for No. 3.

In case of the mixture of Red and White Winter Wheat, it shall be graded according to the quality thereof, and classed as White Winter Wheat.

No. 1 Colorado Wheat shall be sound, plump, and well cleaned.

No. 2 Colorado Wheat shall be sound, reasonably clean, and of good milling quality.

No. 3 Colorado Wheat shall include Colorado Wheat not cleaned and plump enough for No. 2, but weighing not less than fifty-four pounds to the measured bushel.

RULE II.—SPRING WHEAT.

No. 1 Hard Spring Wheat shall be sound, plump, and well cleaned.

No. 2 Hard Spring Wheat shall be sound, reasonably clean, and of good milling quality.

No. 1 Spring Wheat shall be sound, plump, and well cleaned.

No. 2 Spring Wheat shall be sound, reasonably clean, and of good milling quality.

No. 3 Spring Wheat shall include all inferior, shrunken, or dirty Spring Wheat, weighing not less than fifty-three pounds to the measured bushel.

No. 4 Spring Wheat shall include Spring Wheat damp, musty, grown, badly bleached, or for any cause which renders it unfit for No. 3.

Black Sea and Flint Pfife Wheat shall in no case be inspected higher than No. 2, and Rice Wheat no higher than No. 4.

RULE III.—CORN.

No. 1 Yellow Corn shall be yellow, sound, dry, plump and well cleaned.

No. 2 Yellow Corn shall be three-fourths yellow, dry, reasonably clean, but not plump enough for No. 1.

No. 3 Yellow Corn shall be three-fourths yellow, reasonably dry, and reasonably clean, but not sufficiently sound for No. 2.

No. 1 White Corn shall be sound, dry, plump, and well cleaned.

No. 2 White Corn shall be seven-eighths white, dry, reasonably clean, but not plump enough for No. 1.

No. 3 White Corn shall be seven-eighths white, reasonably dry, and reasonably clean, but not sufficiently sound for No. 2.

No. 1 Corn shall be mixed Corn of choice quality, sound, dry, and well cleaned.

No. 2 Corn shall be mixed Corn, dry, reasonably clean, but not good enough for No. 1.

No. 3 Corn shall be mixed Corn, reasonably dry and reasonably clean, but not sufficiently sound for No. 2.

No. 4 Corn shall include all Corn, not wet or in heating condition that is unfit to grade No. 3.

RULE IV.—OATS.

No. 1 White Oats shall be white, sound, clean, and reasonably free from other Grain.

No. 2 White Oats shall be seven-eighths white, sweet, reasonably clean, and reasonably free from other Grain.

No. 3 White Oats shall be seven-eighths white, but not sufficiently sound and clean for No. 2.

No. 1 Oats shall be mixed Oats, sound, clean, and reasonably free from other Grain.

No. 2 Oats shall be sweet, reasonably clean and reasonably free from other Grain.

No. 3 Oats shall be all Oats that are damp, unsound, dirty, or from any other cause unfit for No. 2.

RULE V.—RYE.

No. 1 Rye shall be sound, plump, and well cleaned.

No. 2 Rye shall be sound, reasonably clean, and reasonably free from other Grain.

No. 3—All Rye damp, musty, dirty, or from any cause unfit for No. 2, shall be graded as No. 3.

RULE VI.—BARLEY.

No. 1 Barley shall be plump, bright, clean, and free from other Grain.

No. 2 Barley shall be sound, of healthy color, not plump enough for No. 1, reasonably clean, and reasonably free from other Grain.

No. 3 Barley shall include slightly shrunken and otherwise slightly damaged Barley, not good enough for No. 2.

No. 4 Barley shall include all Barley fit for malting purposes, not good enough for No. 3.

No. 5 Barley shall include all Barley which is badly damaged, or from any cause unfit for malting purposes, except that Barley which has been chemically treated, shall not be graded at all.

Scotch Barley—The grades of Nos. 1, 2 and 3, Scotch Barley, shall correspond in all respects with the grades of Nos. 1, 2 and 3 Barley, except that they shall be of the Scotch variety.

This rule shall be in force on and after Sept. 1, 1883, but it is provided that all Barley in store on said date, inspected in under the rule hereby amended, shall be inspected out in accordance with the provisions of said rule.

These rules shall be in force on and after Dec. 1, 1884, but it is provided that all Grains in store on said date, inspected in under the rules hereby amended, shall be inspected out in accordance with the provisions of said rules.

RULE VII.

The word "new" shall be inserted in each certificate of inspection of a newly harvested crop of Oats until the 15th of August, of Rye until the 1st day of September, of Wheat until the 1st day of November, and of Barley until the 1st day of May of each year. This change shall be construed as establishing a new grade for the time specified, to conform in very particular to the existing grades of grain, excepting the distinctions of "new" and "old."

RULE VIII.

All Grain that is warm, or that is in heating condition, or is otherwise unfit for warehousing, shall not be graded.

RULE IX.

All inspectors shall make their reasons for grading grain, when necessary, fully known by notations on their books. The weight alone shall not determine the grade.

RULE X.

Each inspector is required to ascertain the weight per measured bushel of each lot of Wheat inspected by him, and note the same on his book.

Any person who shall assume to act as an Inspector of Grain, who has not first been so appointed and sworn, shall be held to be an imposter, and shall be punished by a fine of not less than $50 nor more than $100 for each and every attempt to so inspect grain, to be recovered before a justice of the peace.

Any duly authorized Inspector of Grain who shall be guilty of neglect of duty, or who shall knowingly or carelessly inspect or grade any grain improperly, or who shall accept any money or other consideration, directly or indirectly, for any neglect of duty, or the improper performance of any duty as Inspector of Grain, and any person who shall improperly influence any Inspector of Grain in the performance of his duties as such inspector, shall be deemed guilty of a misdemeanor, and, on conviction, shall be fined in a sum of not less than $100 nor more than $1,000, in the discretion of the court, or shall be imprisoned in the county jail no less than three nor more than twelve months, or both, in the discretion of the court.

The Chief Inspector, and all persons inspecting grain under his direction, shall in no case make the grade of the grain above that of the poorest quality found in any lot of grain inspected, when it has evidently been "plugged" or otherwise improperly loaded for the purpose of deception. Wheat which has been subjected to "scouring," or to any process equivalent thereto, shall not be graded higher than No. 3.

All persons employed in the inspection of grain shall report all attempts to defraud the system of grain inspection as established by law.

They shall also report to the Chief Inspector, in writing, all instances where warehousemen deliver, or attempt to deliver, grain of a lower grade than that called for by the warehouse receipt. They shall also report all attempts of receivers or shippers of grain to instruct or in any way influence the action or opinion of the inspector, and the Chief Inspector shall report all such cases to the Commissioners.

We append a list of the leading commission merchants and brokers who transact the bulk of the grain business in Chicago, all of whom are members of the Board of Trade:

Ash, Isaac N., & Co., 164 Washington Street.
Ashley & Co., 84 La Salle Street.
Bailey, E. W., & Co., 153 Washington Street.
Baldwin & Stone, 126 Washington Street.
Bensley Bros., 133 La Salle Street.
Carr, H. H., & Co., 123 La Salle Street.
(Norman B. Ream, Special.)
Culver & Co., 123 Washington Street.
Driver, Edward A. & Co., 157 Washington Street.
Edwards, E. & H. C., 10 Metropolitan Block.
Everingham L. & Co., 125 La Salle Street.
Fowler, B., & Co., 166 Washington Street.
Gregg, Son, & Co., 126 Washington Street.
Hamill & Brine, 154 Washington Street.
Hamill & Congdon, 156 Washington Street.
How, Geo. M., & Co., 238 La Salle Street.
King & Curtis, 156 Washington Street.
Krull & Volger, 123 S. Water Street.
Lamson Bros., 119 La Salle Street.
McCrea, S. H., & Co., 169 Washington Street.
Milmine, Boardman & Co., 143 La Salle Street.
Orr, S. C., & Co., 155 Washington Street.
Power, Boyd & Co., 117 South Water Street.
Rosenbaum Bros., 133 La Salle Street.
Stevens, E. B., & Co., 122 La Salle Street.
Taylor, C. H. & Co., 123 La Salle Street.
Van Inwagen, James, 165 Washington Street.
Wanzer & Co., 84 La Salle Street.
Young & Nichols, 159 Washington Street.

LIVE STOCK.

To account for the continuous and astonishing development of the live stock interests of this city, and its present enormous magnitude, phenomenal and paralleled nowhere in the world, we have only to consider a few of many causes which have combined to bring about this result. In the first place, all of the important railways of the West lead to Chicago in a network of converging lines. Second is, the proximity of the city to the vast cattle ranges of the West, and its location at the eastern gate of the greatest corn and stock producing states in the Union. Third, and an influence not to be under-estimated is the capacity of its yards and the facilities for the economic handling of stock, feeding, loading and reshipping, which are unequaled anywhere else in the world. Again, and a most important factor in building up the live stock business of this city, have been the improved methods of transportation introduced within the past few years, and the eminently successful processes of transporting meats in refrigerator cars which has already quadrupled the exports. Indeed, the shipments each day of the year aggregate over 4,000 carcasses of beef to the East and Liverpool. Finally, we must take into consideration the ever growing demand of Europe for American beef and pork, and the almost entire dependence of our own great Eastern seaboard cities upon the grazing states and territories of the West; we must remember the wonderful impetus which these causes have given to stock raising

within the past decade, and the immense profits of the business, largely augmented by the invention of the barbed fencing now so much in vogue. And when we reflect that the bulk of this vast business is via Chicago, and in fact naturally seeks a city whose banking facilities are easily adequate to the management of transactions aggregating two hundred millions per annum, or indeed triple that sum, we have in a nut-shell the principal causes of the surprising growth of our live stock interests, which have made Chicago not only the largest stock market, but exceeding each year in her receipts of cattle the combined total of any other two markets in the world.

The time is not long past when the live stock business of this city was carried on in a very primitive way. Men are now living and still engaged actively in business, who bought and sold their stock at the old "Bull's Head" tavern, at the intersection of what now are known as Madison street and Ogden avenue, where cattle were *corralled* on the prairie, and where the Chicago River supplied the only means of watering them. Such has been the marvelous growth of this interest since 1850, that from a comparatively insignificant sum of money, representing the total valuation, for that year, it reached in 1866, $42,765,328, growing to $117,533,942 in 1875, and to $201,252,772 in 1883.

A potent factor in this marvelous increase has been the well directed enterprise and uniformly excellent management of the Union Stock Yards, where this gigantic business has been carried on. The magnitude reached by the traffic in 1864–5, was out of all proportion to the facilities offered for the convenient and satisfactory transaction of the business. The constant and rapid increase of the trade resulted in the construction of these yards in 1865, which were opened for business in December of that year. The company owns 360 acres of land, and some forty miles of railroad

track, making a transit through the city and running through different parts of the yards, connecting with every road entering here. There are fifty miles of switch-tracks, all laid with steel rails. The convergence of the entire system of railway lines in the West at this point makes this the most accessible point in the country for a great live stock mart, and these yards have been pronounced by experts in such matters both in the United States and Europe as the most perfect in plan, detail, arrangements and appointments, of any in the world. One hundred and seventy-five acres of land are under plank, divided up for different kinds of animals, as follows: One hundred acres of cattle yards, and seventy-five acres of covered hog and sheep pens. There are twelve hundred cattle pens, with a capacity for yarding 20,000 cattle, thirteen hundred hog pens, with capacity for 150,000 hogs; three hundred sheep pens, with ample room for 5,000 sheep. There is also stabling for 1,000 horses. So complete are the arrangements for handling stock, that fifteen hundred car loads can be unloaded and taken care of daily. Running through different parts of the yards are fifteen miles of macadamized streets. Forty miles of water and drainage pipes run underneath the whole system, forming a complete network, conveying water to every yard and pen in this immense inclosure and securing perfect drainage; considerations of the first importance from a sanitary point of view, as well as for the convenient handling of stock.

Although when these yards were built and equipped it was supposed that the facilities they supplied to transact and expedite business would be ample for many years, it was not long before additions were found to be necessary. From time to time these have been made, costing for some years upwards of $100,000, with such additions and improvements as the enormous and steady increase of business required.

It has come to be well understood that whenever additional facilities are found to be needed to expedite the traffic at these yards, the management at once set about supplying them. During 1883, to meet increased and increasing wants, a large number of new cattle pens were built; new stretches of elevated driveway for passing hogs from the central portions of the yards to the packing-houses and shipping departments were provided; a new shipping department for the accommodation of the Chicago & Atlantic Railway was added, and various minor improvements made.

Additional facilities have also been supplied the present year to afford complete accommodations for all branches of this vast business, of which public sales of improved breeds of cattle, horses, etc., are an important feature. A large pavilion has been constructed in which these sales are held, complete in all its arrangements and appointments. It is in circular form, with a roomy arena for the display and sale of animals, north and south entrances and exits, platform for the criers, clerks of the sales, reporters' tables, etc.; amphitheater with seating capacity for six hundred persons, etc. It is well lighted and is heated by steam. Public sales are held of cattle brought here by owners of noted herds from all parts of the United States and the Dominion of Canada, this being a very convenient and accessible point for buyers to reach from all parts of the country who desire to purchase blooded stock. A regular horse market has also been established at the yards, where a large number of imported as well as American bred horses of improved blood are annually bought and sold.

Within the enclosure of 360 acres are large and commodious buildings, necessary to the vast business transacted. The "Transit House" is a first-class hotel, erected at a cost of $250,000, elegantly furnished and superbly kept, the charges to stockmen being $2.00 a day only, or fifty cents

per meal and fifty cents for lodging. The Exchange Building is a large two-and-a-half story brick structure 60x380 feet, located in the center of the yards. It is divided up as follows: Large Board of Trade room, main offices for the Stock Yards Company, offices for the Superintendent, Secretary and Treasurer, the Union Stock Yards National Bank building, 40x60, telegraph office, postoffice, restaurant, 60x80, saloon, packers' offices, offices for Eastern shippers, news stand, barber shop, fruit stands, and about one hundred offices for commission firms, ten large hay barns, ten large corn cribs, a number of horse stables, thirteen scale houses, each containing one of Fairbanks' improved scales, with a capacity for weighing several carloads of cattle or hogs at a draft; machine shops, depot buildings, printing office, and numerous other buildings used in the transaction of the business of the yards. There are two large Artesian wells situated in the center of the yards, one of which is eleven hundred and the other twelve hundred feet deep. These wells flow an abundance of pure water which is conveyed through pipes to every cattle yard and hog pen within the enclosure. They also afford a supply ample to extinguish any fire that may occur.

The Union Stock Yards National Bank, with a capital of $500,000 and a surplus of $100,000, is situated in immediate proximity to the Exchange building, and ranks among the soundest banks in the United States. It is practically the financial agent for the live-stock shippers, buyers and commission houses engaged in this trade, and an idea of its transactions may be had when the fact is known that from one-half to one million dollars, or its equivalent, passes through it daily, during the busy season, to move the enormous live stock business here.

The Drovers' National Bank of the Union Stock Yards is a somewhat recent addition and acquisition to the financial

facilities afforded here; it was established in 1883, and is located directly opposite the Stock Yards.

This is exclusively a *cash market;* it is also known to be quick and active—advantages that stock-growers and shippers appreciate—hence the fact that nearly all operators in the vast grazing regions of Texas, Kansas, Nebraska and the Western Territories bill their stock to this point. Buyers from all points in the East who operate in fat cattle, and others from every part of the country looking for stock, cattle, sheep and hogs, are in constant attendance here; the city of packing-houses (whose enormous requirements are elsewhere given in this work) are located at the yards, and are essentially a large factor in the business transacted there. These unmatched facilities and accessories in the conduct of the live stock traffic of the Western continent, readily explain the prominence of Chicago as the leading live stock market of the world. Shippers and stockmen realize fully its advantages, which are in short, that they are almost certain to obtain at any time of the year the full value of their stock; that they recive immediate cash returns, or their equivalent, on the day of sale; that this is the recognized leading mart of the world; that buyers congregate here from all points, which creates demand for stock of every description.

In further support of the reputation of this market, and in marked contrast with other live stock markets, it should be noted that during the recent financial panic the receipts at these yards were quite as large as usual, and the market active at good round prices. The producer and shipper received in payment for their stock whatever they demanded, gold, currency or exchange, and the buyer found a ready sale for his exchange at the usual rates of discount. In short the business moved along here through the days of the panic in the even tenor of its way, without let, hindrance or cessation.

The Chicago Live Stock Exchange was recently organized by men engaged in breeding, feeding, shipping, selling, slaughtering and packing live stock, and shipping dressed beef.

It numbers over 200 members, and was organized for the promotion of the interests of the stock-growing fraternity generally. It is intended to have a competent and reliable veterinary surgeon at the yards for the purpose of preventing the introduction there of any cattle in any way diseased, in order that the public may be fully assured that no unhealthy live stock, or impure meat, will ever be placed upon the market from these yards. This officer will be in the employ of the Exchange, and entirely free from any outside influence.

The Union Stock Yards & Transit Co. will next spring erect a hall and offices for the use of this Exchange.

The following are the present officers of the Chicago Live Stock Exchange: Elmer Washburn, President; Peter H. Beveridge, Vice-President; Charles W. Baker, Secretary; and Levi B. Doud, Treasurer, with a Board consisting of eleven directors.

The following statements, extracted from the annual reports of Mr. George T. Williams, Secretary and Treasurer of the Union Stock Yards, giving the total receipts, shipments, and valuation of stock for the past eighteen years, contain a number of instructive and suggestive facts:

TOTAL RECEIPTS OF STOCK FOR EIGHTEEN YEARS.

	CATTLE.	CALVES.	HOGS.	SHEEP.	HORSES.
1865, 5 days	613	----------	17,764	1,433	----------
1866	393,007	----------	961,746	207,987	1,553
1867	329,188	----------	1,696,738	180,888	847
1868	324,524	----------	1,706,782	270,891	1,902
1869	403,102	----------	1,661,869	340,072	1,524
1870	532,964	----------	1,693,158	349,853	3,537
1871	543,050	----------	2,380,083	315,053	5,963
1872	684,075	----------	3,252,623	310,211	12,145
1873	761,428	----------	4,437,750	291,734	20,289
1874	843,966	----------	4,258,379	333,655	17,588
1875	920,843	----------	3,912,110	418,948	11,346
1876	1,096,745	----------	4,190,006	364,095	8,159
1877	1,033,151	----------	4,025,970	310,240	7,874
1878	1,083,068	----------	6,339,654	310,420	9,415
1879	1,215,732	----------	6,448,330	325,119	10,473
1880	1,382,477	----------	7,059,355	335,810	10,398
1881	1,498,550	48,948	6,474,844	493,624	12,909
1882	1,582,530	24,965	5,817,504	628,887	13,856
1883	1,878,944	30,223	5,640,625	749,917	15,255
Total	16,507,957	104,136	71,975,290	6,538,837	165,033

TOTAL SHIPMENT OF STOCK FOR EIGHTEEN YEARS.

	CATTLE.	CALVES.	HOGS.	SHEEP.	HORSES.
1866	263,693	----------	482,875	75,447	162
1867	203,580	----------	758,789	50,275	387
1868	215,987	----------	1,020,329	81,634	2,185
1869	294,717	----------	1,086,305	108,690	1,538
1870	391,709	----------	924,453	116,711	3,488
1871	401,927	----------	1,162,286	135,084	5,482
1872	510,025	----------	1,835,594	145,016	10,625
1873	574,181	----------	2,197,557	115,235	18,540
1874	622,929	----------	2,330,361	180,555	16,608
1875	696,534	----------	1,582,643	243,604	11,129
1876	797,724	----------	1,131,635	195,925	6,839
1877	703,402	----------	951,221	155,354	6,598
1878	699,108	----------	1,266,906	156,727	8,176
1879	726,903	----------	1,692,361	159,266	9,289
1880	886,614	----------	1,394,990	156,510	8,713
1881	938,712	33,465	1,289,679	253,938	11,108
1882	921,009	10,229	1,747,722	314,200	12,788
1883	966,758	12,671	1,319,392	374,463	14,698
Total	10,815,512	56,365	24,175,098	3,018,634	148,353

Prior to 1881, calves were classed with cattle.

VALUATION OF STOCK FOR EIGHTEEN YEARS.

1866	$ 42,765,328	1875	$ 117,533,942
1867	42,375,241	1876	111,185,650
1868	52,506,288	1877	99,024,100
1869	60,171,217	1878	106,101,879
1870	62,090,631	1879	114,795,834
1871	60,331,082	1880	143,057,626
1872	87,500,000	1881	183,007,710
1873	91,321,162	1882	196,670,221
1874	115,049,140	1883	201,252,772

Following we append a list of the leading Live Stock Commission firms, who transact the bulk of this business in Chicago.

Wood Bros. (S. E. Wood, James Wood, E. A. Wood). Rooms, 18 and 20 Exchange Building.

Conover & Herrick (H. H. Conover, E. K. Herrick). D. A. Hall, Special. Successors to Conover & Hall. Rooms, 34 and 36 Exchange Building.

Hanna, Scott & Co., (J. S. Hannah, M. Scott, A. Waggoner). Room, 97 Exchange Building.

Ingewrsen Bros. (H. C. Ingwersen, C. H. Inguersen). Room, 43 Exchange Building.

Beveridge, McCausland & Co. (P. H. Beveridge, S. C. McCausland, D. Burdick(. Room, 42 and 44 Exchange Building. Refers to Union Stock Yards National Bank, Chicago; First National & Farmers' National Bank, Geneseo, Ill.; First National Bank, Marengo, Iowa; First National Bank, Freemont, Neb.; Emmerson & West, Greeley, Col.

Campbell, Lancaster & Co. Union Stock Yards, Chicago; National Stock Yards, East St. Louis; Kansas City Stock Yards, Kansas City, Mo. Members of the firm are located as follows: James H. Campbell, Chicago. G. Lancaster, St. Louis; G. W. Campbell and James Lancaster, Kansas City.

Conger, R. P., & M. Room 63 Exchange Building. Refers to L. J Gage, Vice President First National Bank, Chicago.

Gregory, Cooley & Co. Room, 58 Exchange Building.

B. A. Hathaway. Grade bulls and car lots a specialty. Room, 58 Exchange Building.

Swift Bros., & Co. Cattle and beef dealers; shippers of dressed beef. Room, 70 Exchange Building.

PACKING INTERESTS.

HOGS.

Chicago's growth in every branch of her commercial interests, is in one sense phenomenal, but in no one industry has she made more rapid strides than that to which a brief consideration is given in this chapter.

Not long ago Mr. Charles Cleaves, an old and honored citizen of Chicago, writing on this subject, said: "I think there were only about 35,000 head of cattle slaughtered during the season from October to January as late as 1857; and not more than 150,000 hogs. In these days, when the number of hogs slaughtered is by the million, that would seem a small business, but it was then thought to be a very large trade." The same writer in his reminisences of early days in Chicago, says: "In 1837 I bought several loads of dressed hogs from farmers as low as $1.25 per hundred. Packing in those days was quite an experiment, and few were found willing to risk their money in it, as they had to carry everything they packed until spring, and then ship East by vessel."

The first regular packers here were the Felt Bros., William and Norman, who continued in the business until 1850-59, when they went into the live stock trade, and were for years known as among the most extensive shippers in the West. But the packing interests in Chicago date their real rise and growth from the establishment here in 1866 of the Union Stock Yards, a short history and description of which are elsewhere given. In that year the total number of hogs

received in this market was only 961,746; of these perhaps not over 100,000 were slaughtered, including those killed for city use and in the packing houses. (In 1883 about twelve per cent. of the total number of hogs were received slaughtered, including, as stated above, those for city use and those handled by the packers.) In the same year the total number of hogs received was 5,640,625, and of this number 4,321,233 were consumed by the packers and city butchers.

While Chicago stands unquestionably at the head of all other cities in the extent and volume of her packing interests, yet both her live stock and her packing trade have, to some extent, suffered by the prohibitory measures passed by certain foreign powers against the importation of American pork and its products. On this subject and referring directly to the action of Germany and France, the Chicago Daily Commercial Report, in its review of our packing interests for the current year, says :

"During the past winter season the foreign demand for product has fallen considerably under an average for past years. The returns show that for the four months comprising the season, the exports from this country were 36,693,497 pounds less than for the winter season of 1882-83. This large falling off was due to several causes, some of which came from the peculiar condition of business, and others, and perhaps the most important, from circumstances beyond the control of the trade. In the first place the shortage in the manufacture made packers more listless and indifferent about forcing foreign shipments than in former years; secondly, the advancing character of the product market, from the opening to the close of the season, resulted in inducing exporters to follow a "hand to mouth" policy in making their purchases, and thirdly, the hostile position of France and Germany had a tendency to unsettle and curtail

the trade generally. These, briefly stated, were the causes that operated unfavorably on the foreign movement, and to them can be traced the poor showing made by the export trade. Of these causes, the most exasperating, if not the most injurious, was the prohibition enforced by France and Germany. The shortage in the manufacture, and the unwillingness of exporters to buy freely on an advancing market, were features of the winter's business that came naturally from the condition of affairs, but the prohibition by the Governments named was regarded as an unprovoked assault upon an American business interest, made by countries supposed to hold friendly relations with the United States. The effect of the interdiction by France and Germany upon business was doubtless somewhat instigated this past winter by the large shrinkage in the packing, yet its moral bearing has been anything but satisfactory. The position taken by these two leading countries has unquestionably had its influence upon consumers of hog products the world over."

America produces annually over 35,000,000 hogs. Of this immense number nearly 6,000,00 or over one-seventh of all the hogs raised in the country, are annually marketed in this city. Last year, as once stated, the total number of hogs received was 5,640,625; these figures are found in the annual report of the Union Stock Yards & Transit Co. and are therefore reliable. In the face of these facts then, there is no room left for doubting Chicago's supremacy, not only as a live stock market, but also as the largest packing center on this continent. And more than that, each year sees these important interests developing, keeping pace with all demands, and extending their beneficent influence to almost every quarter of the civilized globe. It is no idle boast, too, that nowhere can be found men of more genuine push and enterprise than that class known as Chicago packers. The

wonderful development of the business under their management is so potent, that no further argument is needed to warrant the assertion. No pains nor money have been spared to complete and perfect the details, to cover economy, cleanliness and dispatch in the methods of converting the live hog into pork and its various products; and the improvements made in this direction are truly astonishing. One writer facetiously puts it, "that Chicago packers have reached that point in the handling of the hog, that about the only thing not utilized in some way is the squeal."

The hair, blood, offal, entrails, heart and other organs are all used and made to bring in money, and by improved methods and appliances, those portions formerly wasted are now turned to profit and account. "For this reason," says the same authority already quoted, "the packer of to-day can make money where a decade ago he would have lost."

Science is constantly developing improved methods and labor-saving machinery, and even now everything is done with precision and on a systematic basis, leaving no room for loss, except where reckless folly or wasteful management prevails. The following carefully prepared table shows the total amount packed here from March 1, 1883, to February 29, 1884; also the leading packing houses, showing the number of hogs slaughtered by each, as well as the aggregate slaughtered by all.

A glance at the table will convince the reader that in no other way could this vast volume of business be more clearly or more concisely shown:

Armour & Co.	943,459
Anglo-American Packing and Provision Co.	542,757
Robert Warren & Co., late Davies, Atkinson & Co.	101,467
Furguson J. C. & Co.	131,749
Hately Bros.	185,001
Tobey & Booth	181,548
Underwood & Co.	140,327
	2,226,308
Other houses	1,626,350
Total packed	3,852,658

Of the firms named here, it may truly be said that the goods packed by them are known throughout the entire world, and acknowledged to be of a superior quality, and distinguished by individual brands and trade-marks, whereas the goods put up by the other concerns, while of a high quality, are not distinguished by any particular marks other than those of the Chicago inspectors of pork for the Board of Trade.

The combined capacity of the packing-houses during the winter season is about 60,000 hogs per day, which would be 360,000 per week, and over 18,000,000 head per annum, for the winter season. With these facilities it can sarcely be a matter of conjecture that Chicago will in the future maintain the position she now holds of being the largest packing center in the world. Of the score or more of large firms now engaged in the business, nearly all run the greater portion of the year through; during certain months they "run light" as compared with the work done in the height of the packing season.

The following table shows the range of prices prevailing in this market for the five past seasons, the figures given being those paid by Chicago packers for live hogs:

WEEK ENDING.	SEASON 1883—84.	SEASON 1882—83.	SEASON 1881—82.	SEASON 1880—81.	SEASON 1879—80.
Nov. 3	$4 20 $5 10	$6 25 $7 75	$5 70 $6 90	$4 40 $4 95	$3 30 $3 95
" 10	4 00 4 95	6 20 7 75	5 50 6 80	4 40 5 00	3 40 4 10
" 17	4 20 5 05	6 20 7 60	5 75 6 75	4 40 5 00	3 50 4 10
" 24	4 15 5 20	5 65 7 00	5 75 6 50	4 45 5 10	3 70 4 40
Dec. 1	5 00 5 50	5 75 7 00	5 75 6 50	4 20 5 00	3 90 4 20
" 8	4 40 5 55	5 85 7 00	5 65 6 55	4 25 5 10	4 35 5 00
" 15	4 50 5 80	5 40 6 75	5 75 6 65	4 25 5 10	4 00 4 85
" 22	4 90 6 20	5 50 6 80	5 70 6 50	4 30 5 10	4 20 4 90
" 29	4 80 5 90	5 60 6 70	5 80 6 65	4 35 5 10	4 30 5 00
Jan. 5	5 10 6 20	5 60 6 70	5 90 6 75	4 40 5 20	4 25 4 85
" 12	5 00 6 10	5 60 6 75	6 00 7 00	4 50 5 50	4 25 4 95
" 19	5 10 6 25	5 75 6 90	6 60 7 05	4 50 5 65	4 25 4 85
" 26	5 50 6 50	5 75 6 90	6 10 6 25	4 70 5 90	4 30 4 80
Feb. 2	5 55 6 75	5 90 7 25	6 15 7 50	5 00 6 00	4 30 4 80
" 9	5 85 7 05	6 10 7 30	6 10 7 50	5 00 6 30	4 15 4 30
" 23	6 40 7 50	6 25 7 65	6 00 7 50	5 20 6 35	4 15 4 75
Mar. 1	6 00 7 60				

The average price for the seasons through as given above are as follows:

For 1883—84	$5 61	For 1890—81	$5 00½
" 1882—83	6 52	" 1879—80	4 37
" 1881—82	6 40		

It should be understood that the packing year opens with the beginning of March and closes with February, and is divided by packers into two periods, known as the summer and winter seasons. The summer season opens with the 1st of March and closes with the 31st of October; the winter season opens with the 1st of November and closes with the 28th of February. During the winter packing season closing in March last, Chicago packers slaughtered but 1,988,460 head of hogs, against 2,525,047 for the same period of 1882-83, and 2,323,847 for the season of 1881-82. From these figures it will be seen that the past season shows a decrease in the volume of business done, and yet the books of the Union Stock Yards and Transit Co. showed

for the first half of the winter season an increase in its receipts of live stock over the same period for the preceding years, although for the entire year in the total receipts of live stock there was a falling off compared with previous years. The causes for this have already been shown in the extract taken from the Commercial Report.

There can be no doubt that with the removal of foreign interdiction and a revival of the now lagging business interest of the country at large, that the figures of former years will again be reached and in time exceeded.

The table here presented shows the total number of hogs packed in Chicago during the past eight years :

TOTAL PACKING EIGHT YEARS.	NO.	AT NET WT.	AV. YIELD LARD.
Packing of Season 1882-83	4,158,948	203.44	33.62
" " " 1881-82	5,012,392	202.32	35.51
" " " 1880-81	5,583,034	200	33.74
" " " 1879-80	4,563,290	217.05	36.95
" " " 1878-79	4,909,971	213.40	41.34
" " " 1877-78	3,941,292	216.18	36.56
" " " 1876-77	2,922,072	203.56	32.46
" " " 1875-76	2,297,528	203.40	32.94

By this it will be seen that from 1875-76 to 1880-81 inclusive, a steady increase was made until the latter year, when the volume of business was almost double that at the beginning of the period mentioned.

The season following 1881-82 was directly after the action of France declaring an embargo on American pork, since which and owing to similar action on the part of Germany, the business has speedily declined in volume. Competent judges say that now, this important industry having adapted itself to a materially lessened demand abroad, has only to meet present requirements at home until a change of policy of the governments mentioned, when an increased activity, can, of course, be expected.

That this change is likely to come at no distant day, there is good cause to believe. It is well known that among the masses in these countries. no prejudice exists against the American hog, and that this cry of diseased pork is only a blind to cover up the real motives prompting the course already taken.

When it is remembered that the food supply of Europe is now only ten months, that for two months in the year it must depend on outside sources for the very bread and meat to keep millions from starvation, it will be seen that American meats, cheap, sweet and wholesome, will, in time, be as warmly welcomed as they are now unjustly excluded and abused.

CATTLE PACKING.

One of the remarkable features of the cattle trade in Chicago is the "dressed beef" business. A few years ago, when this now important industry was started, although it then met with pronounced popular favor, yet its most sanguine supporters did not dream that it would soon assume its present immense proportions. On the other hand, there were those, who, viewing with alarm its rapid growth, predicted that the days of shipping on the hoof were numbered; time has shown, however, that the latter class did not fully comprehend the importance nor the magnitude of the live stock shipping trade.

For to-day, figures disclose that, marvelous as has been the increase in dressed meats, yet it has not been so much at the expense of the live stock business as might be supposed; *apriori* that the increase the past year in the dressed beef business, has not greatly exceeded the increase in the total receipts of cattle. While the above is true, it must of course be admitted that the "new way" is steadily encroaching on the old, and, despite all that may be said or done against it, is destined to still further advance in popular favor.

The past year fully one-half of the total receipts of cattle at this market went into cans or refrigerator cars, and from there was distributed to consumers in the East. When Chicago dressed beef first made its appearance in the market of New York, at the rate of a train load daily, it nat-

urally excited much consternation and no little opposition among the live stock shippers. An effort was immediately made to have the railroads advance the freight charges on dressed meat to the East, which was finally done, though it has in nowise crippled the business, because over thirty carcases are now shipped in a car, while on the hoof eighteen animals make a car load.

It did not take the people of New York long to learn that our dressed meat, shipped to them in refrigerator cars, was much better than that obtained from animals shipped there on the hoof, and then slaughtered by home butchers; besides, it had the additional merit of being cheaper. Now the leading hotels and restaurants of that city make a specialty of setting before their patrons the finest Chicago dressed beef, and all stand ready to attest its undoubted excellence. In fact, refrigerator beef from this city is now sold almost everywhere throughout the Eastern and Middle States; large amounts are also shipped north and to the larger towns in this State, and not a little of it is exported. In point of quality, the cattle purchased at the Stock Yards here for shipment in dressed form are fully as good, if not indeed better, than those taken by Eastern buyers for shipment on the hoof. Indeed it is a fact undisputed that the dressed beef men pay more for cattle, fat and just suited to their wants, than operators in live stock can afford to give.

It has been found impossible to give more than an approximate estimate of the number of cattle used here during the past season in the packing and dressed meat trade. Many small houses that slaughter, or have their killing done at the Stock Yards, sell the choicest portions of their animals to city market men and hotels, and cure by drying, packing into barrels the other parts. Neither are there any reliable figures obtainable as to the exact number used for city consumption; it is probably not far from

150,000 head for the entire year. But, at any rate, the figures which have been gathered from the most reliable sources—the packers themselves—show that the dressed meat business is now second only in importance to that of hog packing. The following carefully prepared tables will show the number of cattle killed for the canning and dressed beef trade for the year ending in February, 1883, with a comparison for the preceding year:

Name.	1882-83.	1881-82.
Swift Bros. & Co.	198,000	164,684
Armour & Co.	156,806	102,210
Libby, McNeil & Libby	109,547	103,710
Fairbank Canning Co.	109,525	81,610
Geo. H. Hammond & Co.	108,000	90,000
Other houses	92,534	112,664
Total	774,412	654,878

Of the above, about 420,000 head were shipped as dressed beef. The following table shows the disposition of the cattle supply for the past year, embracing the seasons 1883-84.

		1883-84.
Shipped alive		955,353
Swift Bros. & Co.	(slaughtered)	330,000
Armour & Co.	"	255,000
Libby, McNeil & Libby	"	125,000
Fairbank Canning Co.	"	115,000
Small houses and the General Trade	"	115,020
Totals		1,895,373

Deducting from the above total the number of cattle shipped alive, we have 940,020 as the approximate number slaughtered in this city for the dressed beef and canning trade, being an increase over that of the seasons of 1882-83 of 165,608.

DRESSED BEEF ON THE PLAINS.

Two years ago there was considerable talk about starting dressed beef establishments on the plains where the cattle are

raised, and from whence they are shipped on the hoof to this and other markets. For a while it was regarded only as "talk," but it has long since assumed a tangible shape. The first to make the venture was the Continental Meat Co., located at Victoria, Texas. This in 1882; others rapidly followed, and now there are slaughtering establishments at Fort Worth, San Antonio and at other points in Texas; also at Cheyenne, in the territory of Wyoming. While it is doubtless true that the dressed beef business will hardly grow as rapidly on the plains, as it has further East, yet there appears to be no lack of interest in it as a business venture; and plenty of shrewd capitalists can be found, who are willing to invest their money and try their fortunes in the dressed beef business on the plains.

BLOOD AND OFFAL DRYERS.

A reference to the chapter published in this work on the pork packing interest contains a statement to the effect that all parts of the hog are utilized for some purpose.

The following is a description of the manner in which tank refuse or offal and blood is treated in order that they may be used thereafter for fertilizing purposes, and the machine employed for that purpose in some of Chicago's largest packing houses:

The refuse matter after being taken from the tank is dropped into vats underneath, where whatever remaining grease there may be is skimmed off. The offal is then run off into still lower vats located in the press-room, re-heated by steam and transferred to the presses, where a large percentage of grease and water is extracted. From the presses the remaining refuse falls into a hopper underneath mounted as a conveyor, and which transfers the material into an elevator, by means of which it is raised into the drying-machine, about twenty-five feet in length, from which it emerges perfectly dry and drops into an elevator which carries it up to the cooling and storage room above. When ready for shipment, it is thrown through hoppers in the floor into bags resting on scales, on which it is weighed.

The drying apparatus is of a very recent and improved pattern, and is made in lengths of twenty-five or thirty feet. It consists of an inner and an outer shell, having between them a three-inch steam space. The inner of these shells is

made with three-fourth inch thick, and the outer five-sixteenth inch thick C. H. No. 1 iron of 50,000 pounds, tensile strength, both being well stayed with three-fourth inch stay-bolts, set seven inches apart, so as to counteract the pressure of the steam against the shells. Located in the lower part of the inner shell is the agitator or shaft. It is furnished with eight rows of stirrers or scrapers, made of $\frac{5}{8}$x$2\frac{1}{2}$-inch wrought iron, and bolted to the circumference of the shaft with two five-eighth inch bolts. These stirrers are arranged spirally, and act as a conveyor to carry the material from one end of the shell to the other during the process of drying. The ends or journals of the shaft are made of cast steel four inches in diameter. The shaft proper, which is fourteen inches in diameter, is run at about 250 revolutions per minute, causing the material to be thrown up and suspended, to a large degree, in the upper part of the cylinder, thus disintegrating and exposing each particle of it to the heating surface of the shell. The use of steel bearings enables the shaft to be run at a greater velocity than heretofore practicable, and with less friction, and the high speed produces increased and better material. The drying-machine is operated by a pulley on each end driven by line shafting overhead. The drying capacity of these appliances is about 750 pounds of blood or 850 pounds of offal per hour. The space between the shells is supplied with steam by a $2\frac{1}{2}$-inch pipe from a boiler. The condensation occurring between the shells is drawn off by means of a steam-trap. All vapors arising from the materials in process of drying are exhausted from the dryer at the top or feed end through a sixteen inch pipe by means of an exhaust-fan. They are blown into a condenser, where the obnoxious vapors are condensed and discharged into the sewer. It will be seen from the foregoing that this dryer is automatic, both in its feed and discharge, and reduces the

labor necessary to treat the material to a minimum. The workmanship on these appliances is of a high character, and it is claimed for them that they largely reduce the cost of preparing the refuse for fertilizing purposes.

The Excelsior Boiler Works, 341 to 345 South Canal Street, Chicago, are the makers of these machines under Gubbins' patent.

INSURANCE.

The vast business interests centered in Chicago render it natural that the various insurance companies of the world should come here for business, yet no city in the world ever gave to insurance men such a painful surprise as did Chicago in 1871.

The total loss by the fire was estimated at over $200,000,000, on which the companies had risks amounting to over $125,000,000, of which considerably over one-half was paid, in round numbers $80,000,000, and while resulting in the ruin of a large number of companies, between sixty and seventy made for themselves a grand record for honesty and uprightness in business. In 1871 there were sixteen local companies and a large number of outside companies doing business in this city. To-day there are six local companies and forty-seven agencies, representing one hundred and seventy companies. The laws of Illinois are not only so perfectly adapted in themselves to the prevention of fraud, but are so efficiently and vigilantly administered that the fact of a company doing business in this State is a complete guarantee of its financial soundness and prudent management, and many of the companies of Great Britain and Germany, as well as the United States, have branch organizations in Chicago.

There are two boards of underwriters in this city. The "Chicago Board of Underwriters," established 1856, R. W. Hosmer, President, Thomas A. Bowden, Secretary, with a

membership of twenty-five, representing eighty-six companies, and the "Underwriters' Exchange," established in 1879, Mr. E. M. Teall, President, Ralph N. Trimmingham, Secretary, with a membership of twenty-two, representing eighty-four companies, both in a flourishing condition. The amount paid these companies last year for premiums was $2,800,000, and the average rate of risks was one per cent, making the total amount of the risks written $280,000,000.

The efficiency of the Fire Department and the Fire Insurance Patrol is universally admitted, and, owing to the great care exercised in taking risks, the proportion of losses is remarkably small, and the various agencies are prosperous.

Following will be found to be leading representative companies and agencies in Chicago:

The City of London Fire Insurance Co. of England.

This company on its entrance to the United States for the transaction of business, made the largest initial deposit ever made by any foreign company for the protection of its American patrons. This deposit has been steadily increasing in proportion to its business. John C. Paige, of Boston, Mass., is the resident manager for the United States, and Edwin A. Simonds, 153 LaSalle street, Chicago, Ill., is general agent for the Western department. Its Chairman (or President) in London, is Sir Henry E. Knight, late Lord Mayor of London. Davis & ReQua are local agents in Chicago.

H. J. Straight & Co., 150 LaSalle street; Sun Fire Office of London.

Carl Huncke, manager Chicago branch office, 92 LaSalle street; Germania Fire, New York.

George W. Montgomery & Co., 151 LaSalle street; American, Newark; Fireman's, Newark; Exchange Fire, New York; Sterling, New York; Germania, New York; Lloyd's Plate Glass, New York.

O. W. Barrett, 172 LaSalle street; Continental, New York; Merchants', Newark; Newark Fire, Newark; Virginia Fire and Marine, Richmond.

R. W. Hosmer & Co., 154 LaSalle street.

Edward M. Teall & Co., 156, 158 LaSalle street.

PLATE GLASS INSURANCE.

The many ways in which accidents to Plate Glass may occur suggests to the careful business man that it is his duty to guard against loss by the carelessness of others, and is equally as important to insure his Plate Glass against accident as his property against fire.

The Lloyd's Plate Glass Insurance Company of New York, of which George W. Montgomery & Co., of No. 151 La Salle street, are the Chicago agents, is formed for the purpose of insuring risks of this character, as well as Plate Glass Mirrors and Show Cases from all accidents not covered by fire policy.

The company is the largest of its kind in the United States, having a cash capital of $100,000.

Total assets January 1, 1884	$156,548 96
Total liabilities	11,298 13
Leaving a surplus	145,250 83

This company in case of loss not only saves the insured money, but also trouble and delay, as immediately upon notification the agents of the company replace the broken glass. Owing to their large business, they have frequently over one hundred breakages per month, and their gross losses for the last year were $42,000.

ACCIDENT INSURANCE.

It would seem that the laws governing natural causes apply not only to those acts which benefit and ennoble the race, but as well to those that deprive it of its power of

enjoying life, aye, even of life itself in perfect ratios, varying only slightly from climatic or other causes. Thus the number of accidents or deaths from railway disasters vary litttle year in and year out, for as lines are extended and an increased number added to the traveling public, so are inventors steadily at work to invent new safeguards to protect the traveler from peril.

Thus, as in the case of fires or deaths by natural causes, disabilities and deaths from pure accident, can be accurately and systematically graded, and insurance against accident becomes as universal as in the case of fire and death. Any person pursuing his ordinary vocation with its attendant train of hazards, can be protected pecuniarily should anything happen to deprive him of the ability to earn his livelihood by the trade or calling to which he was accustomed. But, say many, accident insurance applies only to the traveling public, who, taking their grip in one hand and their life in the other traverse the world, either for pleasure or profit. Not so! Accident insurance applies to all. The banker sitting in his counting-room may be struck and disabled by a missile thrown by a careless boy or a reckless man.

The clerk crossing the street may be run over by a swiftly driven cab. The mason may fall from or with a scaffold, and not only these but innumerable other instances as well.

By careful living we protect ourselves from disease. Who can protect himself against sudden accident or calamity from causes over which he has no control?

The Accident Insurance Company of North America was organized for exactly this line of insurance—to indemnify for all bodily injuries sustained or effected through external, accidental and violent means. The conditions of the policies are broad and liberal, and it possesses a high reputation for reliability. It has paid thousands of losses,

and in addition to the deposit required by the Insurance Department, has funds available for that purpose in the principal cities of the United States.

Its home office is Montreal, but it has agencies throughout the United States and Canada as well. The agency for the West and Northwest was established in Chicago in 1882, by Larrabee Bros., 177 LaSalle street.

The idea at this time in the West was a new one, confined almost exclusively to travelers, but by their efforts, and the employment of energetic men to assist them, the business has been so thoroughly canvassed, and its merits so widely disseminated, that to-day it is one of the most popular methods of insurance. The business in Illinois alone has increased from $24,000 premiums received in 1882 to $67,000 in 1883, with a still larger increase for 1884. The local agents are Wheeler & Gaylord, No. 183 LaSalle street, who superintend the agencies in Iowa and Illinois.

ELECTRIC LIGHTS AND APPLIANCES.

The past decade has witnessed phenomenal advances in the field of electrical discovery, and, as the subject is now engaging the attention of the most skilled and brilliant investigators, there is reason to believe that the discoveries of the next generation will transcend even the surprising accomplishments of this.

The world is ripe and ready for any marvel; no announcement, however incredible, would now occasion the derision once excited by the possibility of telephonic communications. The claims of inventors, no matter how extravagant, are heard with respectful attention; and the discoveries of man keep pace with his necessities. That it would be either possible, or desirable to improve the quality of the Electric Lights now in use, few will contend, since for a powerful, brilliant, constant light, they leave little to be desired, indeed there is no demand for better illumination than that furnished by the various companies now in the business, while the cost compares favorably with that of oil, gas, or any other method of illumination. This is best evidenced by the fact, that many of our merchants, transportation lines, and municipalities, are each year substituting electricity for the primitive lights until recently so universally used.

There are now doing business in this city seven foreign electric lighting companies, and four local companies. They have all been established or located in Chicago during the past three years, and the record of their growth during

that time is scarcely to be paralleled by any other industry, showing as it does at the close of the second year, a business amounting to $500,000, while the rate of increase thus far in 1884 swells the total for the third year to over one million of dollars.

The presence in this city of every prominent Electric Light Company in the world, the consequent rivalry, and the eagerness of each, to be the first to introduce a light into a new town, renders Chicago beyond all question the best market in the world for buyers, since they can here see in constant operation all the different systems of illumination, and examine and compare their merits before deciding which is best suited to their particular purpose.

Indeed, the competition is so close that nothing but first-class lights are offered at all, and those at prices which seem more with a design of introducing the lights than of making them a source of present profit.

It is believed that the next three months will see above one thousand additional lights in operation in this city alone.

THE SPERRY ELECTRICAL LIGHT MOTOR AND CAR BRAKE CO.

The Sperry system of electric lighting is probably more complete within itself, and includes more of the recent discoveries and attainments essential to a successful and economical system of lighting than any other one system. The two systems, arc and incandescent, have been brought to a degree of excellence verging on perfection. Their entire system is formed upon and protected by patents of their own, all new, and obtained within the past two years, and cover the United States, Canada and Europe.

Among the apparatus pertaining to an electric lighting system, the dynamo is the only source of production or supply, and the Sperry Dynamo has 45 per cent. the advantage

over any other dynamo made of similar size, the other dynamos having but one magnetic field, an outer one. The Sperry has two, an outer and inner field of equal intensity, thereby doubling its working capacity, and enabling it to maintain and supply a larger number of lights at less expense than any other system.

In their incandescent system they use a dynamo automatically regulated, by which the lights in the circuit can be reduced to any number without any injury to the dynamo or the remaining lights, the dynamo being automatically regulated to supply electricity to maintain only the number of lights actually in use, and adapting itself from the whole number on the circuit to a single light. They have also a system of lighting by which they produce both arc and incandescent lights from the same dynamo.

The Sperry Lamp is operated solely and automatically by the current that feeds the arc, and is constant, steady, and reliable, neat, simple and efficient, and has been pronounced by all who have seen its workings, a marvel of beauty, and has given universal satisfaction to all who use it. The office of the company is located at Nos. 370 and 372 Wabash avenue, with the following officers: Garlusha Anderson, President; Lawrence J. Fitzgerald, Vice-President; Edwin B. Palmer, Secretary and Treasurer; Elmer A. Sperry, Electrician.

THE FULLER ELECTRICAL COMPANY

has its head office at 37 West 14th street, New York, and its Western office at 197 Madison street, Chicago. This company was organized in 1878, and is one of the oldest and most prominent corporations engaged in the business of electric lighting; its shareholders and directors are among the leading bankers and business men of New York City. The operations of the company extend to all parts of the

United States, Canada, Mexico, and other countries; and in the city of Chicago this company's system of lighting has been received with especial favor and extensively adopted. Under an extended list of its own patents, the company manufactures electric motors, dynamos, electric lamps, and all kinds of the most improved appliances pertaining to a complete system of electric lighting Estimates are furnished for every description of electric light work, and particular attention is given to the formation of local companies for the purpose of operating under the patents and rights of this system.

WESTERN ELECTRIC COMPANY.

The Electric Light System of the Western Electric Company is complete in all details, and produces one of the brightest, steadiest, and most agreeable arc lights known.

This company is well known in many branches of electrical manufacture. Among its leading products are:

Electric Bells and Annunciators, for houses and hotels, including the new Return Call and Fire Alarm for hotels.

Subterranean and Aerial Cables of all kinds.

Telegraph Instruments.

Automatic Fire Alarm Apparatus.

Edison Electric Pen.

Electric Gas Lighting Apparatus.

The factories of the Western Electric Company in Chicago, New York and Boston, are the three largest of the kind in America.

Further information regarding all kinds of electrical goods can be obtained by addressing this company.

THE GILL & SEGERDAHL ELECTRIC COMPANY

have always in stock a large supply of electrical apparatus, which are made after their own designs. The company

make a specialty of fitting up hotels with a thorough system of electrical apparatus, and private residences as well.

THE BADGER ELECTRIC COMPANY

was organized to rent lights, and its plant is located at No. 10 Arcade, where it has capacity to furnish 250 lights, and at the present time rents seventy-five.

The wires are carried under ground, which, as before referred to, while rendering them perfectly safe, is the cause of much expense, although the plant now pays a return of eight per cent. on the investment, which shows the profitable nature of the enterprise, and it is one offering special inducements to capitalists.

Mr. S. S. Badger is President of the company. Mr. Badger is the only "broker" in electric lights in this city. His office is located at No. 175 Wabash Avenue, where information of every description regarding every conceivable electric light can be obtained.

The marked advantages possessed by some systems for certain kinds of lighting over others, renders a bureau, as we may term it, for information similar to this of great importance. Mr. Badger can also supply lights at manufacturers' prices, and, as he has had a very large experience in putting up dynamos, wires, etc., can be the means of saving much money to all intending purchasers.

BREWING.

There is reason to believe that in the future, as in the past, the world will still continue the use of stimulants, and that the total abstinence of any civilized people is entirely out of the question. Neither does it seem desirable, since among persons of the simplest habits in drink and diet have never been found the most robust, industrious, persistent and successful men. The tendency of the times, however, is unquestionably towards the disuse of distilled and the freer use of natural liquors, a change which cannot fail to be a benefit to the world, since the most temperate countries are those in which the consumption of malt and vinous beverages is most general. This is plainly evident in our own case; as a people, we are notably less intemperate since the introduction of German beer. The abuse of distilled liquors has been, in a great measure, supplanted by the music, mirth and innocent recreation, which invariably attend the use of a beverage at once harmless and exhilarating. Thus, in a great and a true sense, beer is a temperance drink. This the most rabid temperance men are forced to recognize; yet, when they are driven by fair argument to this position, they endeavor to avoid an admission so repugnant by asserting that beer creates a craving for ardent spirits, and in that way leads to drunkenness. That this is without foundation is abundantly demonstrated by the revenue returns, which show that the per capita consumption of distilled liquors steadily declines with the increase per

capita consumption of beer. The fact is, inebriety and its attendant crime and poverty cannot be traced to malted liquors. Men have recourse to ardent spirits, not to malt liquors, when they wish to forget their misery, to subdue their craving for food, or to gain strength for their ceaseless toil. "Insufficient food," says Liebig, "drives men to drink by an inexorable, inevitable law."

In proof of this, it is instructive to remember the relative sobriety of wine and beer drinking countries. In Italy drunkenness is unknown, yet wine is the only beverage; the land, however, is overrun with beggary, which certainly cannot be attributed to intemperance. Again, consider the statistics of crime, and the extraordinary difference between the percentage of crimes committed by the Irish and Germans, the one being no less addicted to ardent spirits than the other to beer. A further evidence, if such is necessary, that beer is not provocative of turbulence and breaking of law, is that at the German festival held last year at Union Hill, 48,000 persons were assembled, yet there were only five arrests for disorderly conduct.

Nevertheless, in the face of fact and reason, there will always be a class of fanatics who will seek to regulate by compulsory laws, the lives and diet of their fellow-men, always forgetting that prohibitory laws are the oldest failures on record, that in fact they have never succeeded in a single instance. Prohibition of wine to the Mahometans drove them to the more destructive and degrading use of opium. The destruction of Chinese vineyards brought into wide-spread use the stronger and more pernicious liquor made from rice. In England the relatively higher tax on beer and malt than on distilled liquors led to an enormous increase in the sale of the latter, and a widely prevalent and terribly increased drunkenness. In our own country, a number of our States have made a series of empirical exper-

iments in prohibitory legislation, and it is not too much to assert that, in every case, the results were notoriously unsatisfactory, if not indeed demonstrated failures. Michigan gave it a twenty years' test, and then abolished it forever. Kansas shows an increase in the number of her licenses, as the outcome of years of internal strife. In Maine the staunchest supporters of prohibitory laws are the contrabandists who each year supply that State with more liquor than she would use under an equitable license law, while after three decades of prohibition, she has six times more paupers than the State of Minnesota, exceeding her in population. Neither have high licenses proved of any avail, fostering immorality, provoking illicit traffic, and aggravating the evils they were designed to check. The high license system does not affect the extremes; the gilded palaces and the vilest groggeries thrive equally, finding in high license a protective law which removes their competitors. One class only is seriously and exclusively affected, and that is the law-abiding middle class, our best citizens, who find the respectable resorts closed, and that the greater facility for doing an illicit business in ardent spirits results in their augmented use, and the banishment of the more harmless beverages.

Little by little, however, we are learning the folly, the futility of all restrictive laws, and that the least objectionable are those which foster a public taste for lighter drinks.

The rapidity with which the great German national drink has made its way among the nations of earth is paralleled, if at all, only by the wide-spread and phenomenal popularity attained by tobacco after its introduction into Europe. Though it is only of comparatively late years that the brewing of beer has been practiced to a considerable extent in this country, it soon sprung into enormous proportions, and at the Paris Exposition American beer triumphed over all the celebrated continental brewers.

There are now but five States and one Territory in all our land which do not contain a brewery within their borders. These are Arkansas, Florida, Maine, Mississippi, Vermont and the Indian Territory. Yet they are not our most prosperous States, indeed their prisons are always full, and no one ever adopts these States as a permanent place of residence unless he is compelled to. In the rest of the Union the sales of beer during the past year show an increase of a million and a half barrels.

The first ale was brewed in this city in 1840, and ten years later the pioneer brewery of Chicago supplied its citizens with beer at the rate of thirty barrels per day. To-day our city ranks sixth in the United States in the output of her breweries, which are among the most extensive in the world. This city produces each year 800,000 barrels of beer, which require in brewing 5,000,000 bushels of malt, or about 4,347,826 bushels of barley, worth on an average $1.00 per bushel; yet the annual consumption in Chicago is not all of home manufacture, in 1884 the product being 743,458 barrels, an increase of 66,905 barrels over the preceding year, while the present consumption amounts to close upon 900,000 barrels.

There are now in Chicago thirty-one breweries of all kinds, having an invested capital of nearly $10,000,000, and affording employment directly to fully 2,000 hands, whose wages will aggregate $1,500,000 per year. In addition to this vast sum, as much more is paid in wages to the labor employed in the dependent industries—the cooper shops, malt houses, glass bottle factories and kindred concerns. If we now make a very moderate estimate as to the number and size of the families of these workmen, it will be seen that there are no less than 16,000 persons in this city who look for their support directly to the breweries.

Again, the beer manufactured in this city is worth $8.00

per barrel, and the brewers pay the United States Revenue Department almost $800,000 annually, while in addition to this they are heavy contributors to the State, city and government taxes.

Though most of the breweries here own their own malt houses, there are fully twenty private malt houses besides, all of whom run to their utmost capacity and find a ready sale for their malt.

We have already spoken of the immense amount of barley consumed by this industry, and the vast sum of money thus distributed among the farmers of Iowa, Nebraska, California, and the two great barley-producing States of Wisconsin and Minnesota. Besides this, however, 1,600,000 pounds of hops are annually required, most of which is brought here from the hop fields of New York, California and Washington Territory.

Of all the industries upon which the brewing of beer bears a potential and beneficient influence, that of the farmer reaps the most direct benefit. When we consider the amount of money paid during the last year for barley, hops, hay and oats, it is a self-evident proposition that whatever would affect the brewing interest would retract upon the agricultural as well, and a failure of a market for the two chief products indispensable to the manufacture of beer—barley and hops—would prove most disastrous to the tiller of the soil. Connected with this, as part of the outside employment, are the large numbers engaged in mining coal, glass manufacturing, gathering ice and furnishing timber for cooperage, vast quantities of each being used in the brewing business. The amount of wages alone paid by these industries is enormous, and falls within the scope of public contributions by this gigantic business. So can be estimated the wide sweep of disaster which would follow its destruction, or even the curtailment of its operation, not to mention the loss of revenue,

which has played so conspicuous a part in the payment of the National debt, and which yields so goodly a proportion to the support of the States, counties and cities, freely bearing the burden of tax, which would else fall upon the lands of the farmer, or be wrung from the meager income of labor.

In conclusion, and to show the gigantic scale on which American breweries are conducted, the following figures, compiled from recent authorities, will not be uninstructive. The United States produced last year 600,000,000 gallons of beer, England, 990,000,000 gallons, and Germany, 900,000,000 gallons; England having 27,000 breweries, Germany 25,000, and the United States only 3,000. This will give some idea of the magnitude of the individual breweries in this country, and of these it may fairly be said, that those supplying the city of Chicago are unsurpassed in capacity, perfection of equipment, or in the quality of the beer produced.

Following will be found the principal breweries of Chicago and those that supply beer for this city:

Bemis & McAvoy Brewing Company. J. H. McAvoy, President; Albert Crosby, Vice-President and Superintendent; George Dickinson, Secretary; Thomas S. Robinson, Treasurer.

Conrad Seipp Brewing Company. Conrad Seipp, President; T. J. Lefens, Secretary and Treasurer.

The Bartholomae & Leicht Brewing Company. Philip Bartholomae, President; Andrew E. Leicht, Vice President and Treasurer; John J. Voelcker, Secretary; George Bartholomae, Superintendent.

The Wacker & Birk Brewing and Malting Company. F. Wacker, President; Jacob Birk, Vice-President; Charles H. Wacker, Treasurer and Secretary.

Chicago Union Brewing Company. Frank P. O'Neill, proprietor. Also brews ale and porter.

Phillip Best Brewing Company. Fredrick Pabst, President; Emil Schandein, Vice-President; Charles Best, Jr., Secretary.

Franz Falk Brewing Company. Franz Falk, President; L. W. Falk, Vice-President; Frank R. Falk, Secretary and Treasurer. A. Barrenschien, Chicago agent.

Joseph Schlitz Brewing Company. Henry Uihlein, President; Alfred Uihlein, Superintendent; August Uihlein, Secretary.

J. Obermann Brewing Company. Charles Duer, Chicago agent,

Cream City Brewing Company. Louis P. Best, manager; Louis Schmuckers, agent, Chicago. Branch, 13 and 15 West Ohio Street.

ALE AND PORTER.

The Besley's Waukegan Brewery, Waukegan, Illinois, was established in 1853.

They brew nothing but ales and porters, unsurpassed for flavor, purity and quality. Their bottled ales and porters are fast taking the place of the imported. This ale was recommended for an award at the Centennial Exposition.

The present officers of the company, are: William Besley, President: E D. Besley, Secretary. The Chicago depot is located at No. 136 North Jefferson Street.

T. D. Stuver, sole agent for Porter's Joliet extra pale stock ale and porter; 249, 251 and 253 Randolph street.

AGRICULTURAL IMPLEMENTS.

Situated at the head of the great inland seas of the continent, and being the centre and radiating point of the greatest railroad system of the world, Chicago has been from an early day recognized as a distributing point unequaled for its facilities and advantages.

Thirty or forty years ago, when manufacturing at the West was comparatively unknown, immense cargoes of farming implements of every conceivable kind were shipped around the Lakes to Chicago from Boston, New York and Albany, and from here distributed by river and canal, before railroads were in use, through Illinois, Indiana, Missouri and the then young Northwest. Every implement that the farmer needed in those days, from a hand hay-rake to a threshing machine, was imported from the East. But this state of affairs long since changed.

There never has been, and perhaps never will be, a very large retail trade in agricultural implements in Chicago, for the reason that the land for many miles around the city is peculiarly unsuited for profitable farming, being flat, uninviting prairie, and fit for little else than the simplest market gardening business. But what the business lacked in the retail way, it has made up immensely in the jobbing and wholesale business. So noted and important has Chicago become in this line within the last twenty years, that all Eastern manufacturers who expect to share any of the immense agricultural implement business of the great West

feel the absolute necessity of having a representative and a branch warehouse here with adequate shipping facilities. Here, therefore, can be found the representatives of all the Plow, Cultivator, Seeder, Harrow, Corn Planter, Reaper, Mower, Thresher, Farm Steam Engine, Corn Sheller, Hay Rake and Wagon manufacturers of the country at large, for this business of manufacturing has long since ceased to be an exclusively Eastern industry, and has gradually been moving westward, and accommodating itself to the enlarged requirements of the country.

The great tide of emigration that has been pressing westward for the past quarter of a century, has very naturally carried with it many of the enterprising manufacturers of farm implements, who have located at eligible points throughout the West, such as Racine, Milwaukee, Minneapolis, Sterling, Freeport, Rockford, Peoria, Decatur and Davenport. In like manner these Western manufacturers are compelled in the nature of things to seek representation in this great city of clearance and exchange.

Though possessed of no natural advantage of water power, its geographical position pointed Chicago out in early days as a very superior manufacturing point, and those who were sagacious enough to locate works here have profited immensely by their forethought. Its nearness to the forests of Michigan, Wisconsin and Indiana, to the iron and copper mines of Lake Superior, the lead and zinc of Galena, and the coal fields of Northern Illinois, together with its unequaled shipping facilities both by water and rail, give it advantages in a manufacturing point of view second to no other city on the continent.

In the business of agricultural implements, there is to-day more capital invested, more men employed, and more machines manufactured in Chicago than in any other city in the world, for America leads the world in this business.

This is but the natural result of the unparalleled growth and development of the Northwestern empire, of which Chicago is the capital and emporium.

The settlement and subjugation of the lands of the West from wild prairie into fruitful farms is little short of a miracle. Chicago was the focal point of this emigration, and the point to where the implements were made and furnished, which in the hands of these new settlers worked such wondrous changes in the Western wilds, and now the wealth of this enriched country is flowing back to Chicago as its source and fountain.

As representative and typical of this immense agricultural implement business, by right of pre-eminence, stands the McCormick Harvesting Machine Company, which can trace a history back to 1831, the year when the late Mr. Cyrus Hall McCormick invented the reaping machine in Virginia. With a business sagacity only equaled by his wisdom as a great inventor, he early saw that Chicago was bound to be a place of great prominence, and here he built his first reaper works in 1847, where 700 reaping machines were built in the succeeding year. The demand for these well-known machines has grown steadily apace from year to year, until the enormous number of 54,841 were built and sold in 1884.

This is the largest establishment of the kind in the world, and Chicago may well feel proud of it, as a worthy representative of the city's marvelous growth. The works employ 1,600 men. Situated on Western and Blue Island Avenues, they occupy an enclosure of twenty-four acres. The massive buildings devoted exclusively to the manufacture of harvesters, binders, reapers and mowers in every variety, are four stories high, and cover an area of 565 feet front by 740 feet deep, giving over thirty acres of floor space. To the rear lies the Chicago River, affording easy

access for heavy laden vessels with lumber, iron or coal, while railroad tracks encircle and traverse the grounds in every direction.

It would require days to inspect these mammoth works in detail through the wood working, iron working, fitting up, painting, decorating and packing departments. These works can boast of a foundry having the largest molding floor under one roof in the world where from fifty to sixty tons of iron are converted into machine castings daily. Two immense fire-proof warehouses capable of holding 25,000 finished machines, worth millions of dollars, are well worth a long journey to see. Piled up high the boxes lie in great tiers, reminding one of the silent Catacombs of Rome, and yet unlike them in another sense, for in a few short months every casket now entombed here will have a resurrection, amid rejoicings under sunny skies in some harvest field, somewhere throughout the earth, bringing peace and plenty to its possessor, and scattering blessings in its path. From here the important work of shipping is carried on at the rate of thirty to forty cars per day.

There is a poetry in this business of manufacturing and shipping such goods for world wide use and in following them in imagination as they begin to separate on their journey, some to find a quiet home on the prairies of the great West, others in the East, sunny South, or on the Pacific Slope, while others must pass over two continents to reach the shores of Russia, or cross the Equator to find a destination in Africa, New Zealand, South America, or Australia, among peoples of different habits, tastes and surroundings, but who are all alike in their appreciation of and preference for the McCormick Harvesting Machines.

DRY GOODS.

WHOLESALE.

A number of causes which it would be impossible to parallel elsewhere have conspired to render the jobbing interests of this city a business of colossal magnitude, chief of which is the vast area embracing seventeen States and all of the Territories, which from their geographical position turn naturally to Chicago as a base of supplies.

Of these the dry goods jobbers are unquestionably in the lead, both in the amount of capital invested and the extent and importance of their transactions.

This business is divided between commission houses who receive their goods directly from the mills and dispose of them by sample, in bulk or unbroken cases, and jobbers proper, who sell from their own stock, supplying the trade as well as the smaller wholesale houses, which are springing up from year to year in many of the minor Western cities.

A number of the larger commission firms advance the money to operate the mills they represent, receiving payment later in the articles thus manufactured. The usual course, however, of commission merchants, is simply to effect the sales, becoming surety for the debt which they collect and forward to the producer less their commission.

The assertion that the legitimate dry goods jobbing houses of this city are the largest of the kind in the United States, may prove a source of surprise to those who have given the subject little attention, and indeed it does appear incredible when we remember that the business interests

of Chicago date in one sense from the fire of 1871. Still the claim is abundantly supported by fact, though the aggregate annual sales of a few firms in New York are somewhat greater when they include their sales on commission as agents of the mills.

It is not difficult to account for the phenomenal development of this, as of all branches of industry, when we reflect that the broad Western States are continually opening new avenues of communication with Chicago and the East, and doubling in population every few years. Besides this the large Western dealers who formerly went to New York, have of late discovered the manifold advantages of purchasing supplies at a nearer market, to which they can make frequent visits with a saving both of time and money.

Again, they can generally save in prices, while finding more extensive and varied stocks from which to choose, since many of the staple fabrics most largely consumed in the West and Northwest are handled in greater quantities by Chicago jobbers. Of these are the goods designed for general wear and usefulness of the best material, strong and serviceable, in which durability has not been sacrificed to extreme fineness and finish. Another important item is the saving effected in freights; not only is the trade becoming even more dependent on the manufacturing done here, but many of the most desirable of the heavy cotton fabrics have of late been placed on the market by the mills of the South and West, this competition with the Eastern States leading manufacturers to consign goods to Chicago with all freight charges paid.

Again, a consideration which no buyer can afford to underestimate, is that the merchant who in earlier years purchased his needed supplies by one, or at most two, annual trips to New York, had invariably left on his hands a stock of goods depreciated more or less in value, when any causes,

failure of crops or a period of financial depression, resulted in a bad business year.

This indeed has been one of the most influential among the reasons inducing him to replenish his stock quarterly, or even monthly, at Chicago.

Lastly, to the dealer coming here for supplies in certain lines, there are many and obvious advantages in obtaining all he requires from the same house or city.

It will also be readily seen that, having resident buyers abroad, our leading jobbers fear no competition in supplying the trade with imported goods. Indeed, singular as it may at first appear, they can actually undersell the Eastern houses, since the cost of transportation from Europe to Chicago direct is considerably less than if the same goods were consigned to New York and re-shipped to Western points; besides which in the former case, there are no profits of middle men to be deducted.

As Chicago is the natural market for the produce of the West, it is almost of necessity the great center for the purchase or exchange of products; even the trade of the Pacific Coast, controlled until recently by the East, is being rapidly absorbed by houses in this city, the past twelve months, showing the surprising increase of nearly fifty per cent. over previous years.

The annual business of Chicago jobbers is in excess of seventy millions, though this necessitates a capital of nearly thirty millions, since the larger houses find it desirable to carry more complete stocks than are required by the Eastern merchant with the mills at his door.

The bulk of this immense business has gradually centered in some half dozen or more great houses, though other firms successfully devote their efforts to handling special lines of goods.

In addition to these are the commission houses, the

immediate representatives of manufacturers, and if in the foregoing figures we now include the transactions thus effected by firms as agents and the ever-increasing business of home manufacturers with the cloak-making interest at their head, the claim of Chicago to be the largest distributing center in the country can scarcely fail to be admitted.

The following are the leading dry goods jobbing houses in Chicago:

Marshall Field & Co.

John V. Farwell & Co.

Carson, Pirie, Scott & Co.

Storm & Hill.

James H. Walker & Co.

Edson Keith & Co., and A. S. Gage & Co., though not strictly speaking dry goods houses, still handle so many goods comprised under this classification, that we would refer our readers to the list of their various departments which will be found in the chapter devoted to the wholesale millinery trade.

DRY GOODS.

COMMISSION.

The time was when all the Dry Goods, Woolen and Clothing Jobbing and Manufacturing houses were obliged to go to Boston for their goods, as that city was the headquarters of the Dry Goods Commission houses, by degrees the Boston houses established branches in New York; to so great an extent were the branch houses appreciated, and in the course of time their sales so much exceeded those of the parent houses that it was found not only profitable, but necessary, to make the New York branch the main house, and such of the houses that continued their Boston offices at all, did so only for the sake of the home trade. This very important change arose from the necessity of the seller being as near the buyer as was practicable; that it was so is evidenced by the fact of all buyers from commission houses going to New York to make their purchases instead of to Boston as they formerly did.

The necessity for the seller to be on the spot is even greater, so far as Chicago is concerned, owing to the greater distance from the mill or port of entry, and although the Dry Goods Commission business of Chicago is in its infancy it is of great enough importance to be very far from insignificant, and that it is appreciated is evidenced by the large purchases made by the leading houses of this and the other Western Jobbing markets out of stock here, and also by the disposition of the buyers to give the man at the Chicago end the preference, all things being equal.

The two great obstacles to the Dry Goods Commission business in this market have been overcome; the first was the reluctance of consigners to send any goods to this market that had not first been sold; they wanted the orders first. As an illustration, when the proposition was made to a leading New York importing house to open a branch house in or consign goods to Chicago, there to await being sold, they replied that when they wanted to open a branch house anywhere they would do so a few blocks higher up on Broadway, New York, but that neither they nor anybody else could afford to carry a stock of goods a thousand miles away. They were prevailed upon, however, to try the experiment, and with a consignment of two cases as a nucleus, their representatives here have gradually impressed them with the importance of this feature, until now, and for the past two years, their stock of goods in Chicago has not been at any time less than $75,000, and during the two busiest seasons exceeds $100,000. The greater number of consigners to Chicago Dry Goods Commission houses have been ss much impressed with the importance of consigning large and well assorted stocks as has the house referred to, and the result has been generally satisfactory to the buyers.

The other obstacle was the fear in the minds of some buyers that should they depend upon the Chicago stocks, they might, if their wants became urgent at times have to pay more for the goods than they would if they ordered them from New York, as some buyers argued that if a New York house carried a stock here on their own account they would have to pay additional rent, salaries and incidental expenses, and that those expenses would have to be borne by the Chicago sales, and if they consigned their goods, the commission they paid would be added to the goods; it took very little figuring to convince these gentlemen that the traveling expenses of a salesman were a larger percentage than the

percentage of expense; and the one or two that were not convinced by the figures at the time have long since been convinced by the facts, as their very large, almost daily, purchases can testify.

The enterprise of the Chicago business men has become proverbial, and in no instance has it served them any better than in the encourgement of the Dry Goods Commission business in their own city, and their encouragement of it has been so hearty and sincere as to make it necessary for those catering to their wants to have thoroughly capable, energetic and intelligent men only as their representatives; and many instances can be related of enterprise on the part of Chicago Commission men that have led to very large transactions at even closer figures than could be obtained elsewhere.

In the matter of importation orders for instance, and they aggregate in amount up in the millions, our leading commission houses that handle foreign goods, Bradford and Manchester, as well as Continental, have this season completed arrangements with certain very large European manufacturers for the sale of their goods, the sale of which was, until now, restricted to one or two New York houses, whereby they can take the importation orders in advance of the season, have the goods shipped through to Chicago in bond without delay at any other port, and not only make their deliveries promptly, but have a surplus stock for the jobbing houses to duplicate from during the season as often, and in qualities large or small as they may want.

The same influence induced the London manufacturers of the celebrated Crown Linoliums, to offer their goods through Chicago to the American trade. Until the spring season of 1884, a certain domestic manufacturer had a monopoly of that line of business; by bringing the Crown goods in competition with them the Chicago agent forced

the other manufacturer to reduce the price of his goods ten cents per square yard. It is needless to say that the trade appreciated the competition to so great an extent, that, in a very short time, the Chicago agent had sold the capacity of his manufacturer for the entire season. One house could at first not be induced to place an order, as they could not be made to believe but that the representations were exaggerated, and more particularly that the goods would not be delivered in time; finally they gave quite a large order on the condition, and the condition was given in writing, that if the goods were not in their store within thirty days from the day the order was given, they were to be released from any obligation to take them. The sale was cabled over, conditions and all particulars in cipher; the goods left London six days after the order was given, the invoice reached Chicago ten days after they were shipped, and the goods were delivered in exactly twenty-four days after the sale was made.

The leading Dry Goods Commission Houses of Chicago are:

Amidown & Smith, A. C. Driggs, Manager, 128 Franklin street.

Brown, Wood & Kingman, 177 La Salle street.

Crittenden, Thomas S.; Agent, Garner & Co., 252 Monroe street.

Haskell, Brown & Co., 247 Monroe street.

Howe, John, and W. N. & Co., 172 Adams street.

Klapp, Jenkins & Co., 245 Monroe street.

Moore, W. I. & Co., 237 Monroe street,

Richardson, Geo. C. & Co., 199 5th avenue.

Stern & Adams, 235 Monroe street.

Stodder & Long, 130 Franklin street, also manufacturers knit goods.

R. D. Wood & Sons, 163 5th avenue, cotton goods, silesias, colored cambrics, bleached muslins, etc., Charles F. Jencks, Agent.

SEWING SILK.

In Chicago, the distributing point for the West and Northwest, are agencies of the leading manufacturers and and dealers of Sewing Silk, Twist, etc., some six in number, whose aggregate sales amount to about one million dollars.

It is said that the art of reeling silk was known in China nearly 2,000 years B. C., it having been discovered by Siling Chi, wife of Prince Hoangti, third Emperor of China, and that homage is still rendered to her as "Goddess of Silk Worms." So well did the Orientals guard the secret of silk culture, that the nature of the fibre was unknown in Europe for more than a thousand years after silk fabrics had been introduced there, and as late as the Christian era some silk fabrics were worth their weight in gold. But notwithstanding a Roman Emperor once refused to purchase a silk robe for his Empress, on account of its expense and the bad example of its extravagance, the silk worm now spins for all; and whether fashion decrees that garments be made of silk or wool, true economy dictates that they all be sewed with Spool Silk, to supply the demand for which the Nonotuck Silk Co., of Florence, Mass., use over 100,000 feet of floor space, on which the various processes of winding, doubling, spinning, reeling, dyeing, spooling, including the knitting of silk hosiery, and underwear, as well as the manufacture and printing of spools, are carried on, giving employment to nearly 1,000 hands, and requiring a weekly supply of over 4,000 pounds of raw silk, yielding an aggre-

gate length in finished sewing silk, twist, embroidery silk, and Florence knitting silk of more than 25,000 miles.

The average length of fibre produced from a single cocoon is not over one quarter of a mile, and as fully one hundred fibres are required to produce sewing silk of average thickness and strength, it appears that fully two and a half million miles of this gossamer fibre are consumed weekly in the manufacture of Corticelli Spool Silk, to produce which more than 10,000,000 silk worms are stripped of their robes. In the process of manufacture, the skeins are soaked in tepid soap suds for several hours, to soften the gum, after which they are placed upon light swifts and wound off on to bobbins, which are then placed upon pins projecting from the bobbin-board of a doubling frame, and from two to ten or more threads drawn off collectively on to one bobbin, which is next placed upon a rapidly revolving spinning-frame spindle. The requisite amount of twist is given while the thread is being drawn from this to the take-up bobbin, which has motion imparted sufficient to give the desired twist, after which it is again doubled, two threads being used for sewing silk, and three for twist, or three-cord sewing silk, and again similarly twisted, but in the opposite direction.

The next operation is reeling into small skeins for skein silk, or large hanks, to be dyed and wound upon spools as desired. This last operation is rapidly performed on a partially automatic machine, on which an expert attendant can wind 1,000 to 1,200 spools of 100-yards each in ten hours, the required number of yards being gauged by the number of courses or layers of silk wound upon each spool. This is done with surprising accuracy at the Corticelli Mills, as shown by daily tests made by a person employed for the pupose, and recorded in book form, many volumes of which have been filled. The record for one year shows that 13,628 tests were made on Corticelli 100-yards, 50-yards and

10-yard spools of silk yielding an aggregate of 1,122 yards in excess of those stamped on the spools, an average of one-twelfth of a yard on each spool over the standard claimed.

The variety of goods manufactured by the Nonotuck Silk Co. is very large, and to supply the increasing demand for their several popular brands, two new mills have recently been added to the large number already occupied.

For ordinary family sewing, dress-making, etc., Corticelli 50-yards and 100-yards stands absolutely without a rival in the market, and wherever they have been brought in competition with other goods, the Corticelli brand has in every instance carried off the highest premium, several gold medals having been awarded to the company for the superiority of their goods, showing extreme care in the manufacture. For button-holes Corticelli 10-yard and 16-yard button-hole twist are the favorite brands. For knitting fancy work of all kinds, as embroidery, etc., the following brands are universally used :

Florence Knitting Silk for mittens, stockings, etc., Corticelli Knitting Silk for embroidery, laces, fringes and macreme work. Corticelli 10-yard Spool Embroidery, Florence Etching Silk for outlines in art embroidery. Florence Darning Silk for repairs on woolen or silk garments, such as hosiery and underwear. Florence Filling Floss, etc.

For shoe manufacturers the Nonotuck Silk Co.'s Pure Dye Machine Twist is preferred by the most critical judges in this line of business all over the United States.

For clothing and merchant tailoring this company make a specialty of several brands to suit the variety of the trade.

Florence Silk underwear recommended by physicians in all cases of rheumatism and nervous diseases, is also made by this company, and the world-renowned Florence Silk Mittens and Ladies' and Gents' Hosiery are also the productions of their mills.

With an experience of nearly fifty years in the business the Nonotuck Silk Co. are able to produce goods of the highest grade of excellence, and such manufacturers may well point with pride to their record, and say, "Deserve success and you shall command it."

The Chicago branch is in charge of Mr. R. W. Hare, Manager.

MILLINERY.

The dealer in this line who comes to Chicago to purchase goods will meet with a number of startling surprises. In the first place he will find that in the comparatively few years since the great fire, a business of vast magnitude has sprung up, commensurate indeed with the wide extent of territory to be supplied. In the second place, he will discover that it is virtually controlled by three immense firms whose aggregate business exceeds the combined total of any equal number of millinery houses in the world. These three firms occupy the three largest and most magnificent stores that can be found anywhere, devoted to the millinery business. Some idea of their immensity can be gained from the simple statement that they each comprise a floor surface of three and one-half acres, making in all more than ten acres of millinery goods.

Again, too, the buyer will find that the Chicago firms in this line carry continually on hand stocks more extensive, varied and complete than are to be found in any other city of the Union. In fact, they include not only everything pertaining to Millinery, such as Straw Goods, Flowers, Feathers, Ribbons, Velvets and Silks, but in addition to these, all articles which come under the head of Ladies' Furnishing and Fancy Goods, Corsets, Notions, and articles of underwear, together with nearly everything else in the Dry Goods trade, if we except the regular staple goods.

It has been frequently stated and the subject of some discussion, that the Millinery houses of this city could and did habitually undersell their Eastern rivals in the markets of the West. The truth of this, and the reasons for it, though not apparent on its face, may be readily shown; indeed the entire situation may be given in a few words.

A certain class of articles, Ladies' and Children's Hats, Corsets, and similar specialties, are manufactured extensively in this city, the three large Millinery houses already spoken of, each having a factory for the manufacture of Hats, Bonnet frames, etc., which are each capable of turning out 4,500 daily. Besides these, there are a number of smaller factories in the city, which together can make 4,500 per day, making a total capacity of 18,000 Hats and Bonnets daily.

It is the same with the manufacture of Corsets, the various factories here having a capacity for the manufacture of 4,000 Corsets daily; hence these goods are placed upon the market direct from the factories with a saving of freight charges and the profits of middlemen.

Goods of foreign manufacture are purchased abroad from first hands, and as they are imported direct, a saving is effected in importers' profits, and in freight, since through rates are always cheaper than local rates for the same distance. Lastly, the goods manufactured in the East are furnished to Chicago dealers at a special discount, since our jobbers are the largest in the world.

That these various sources of profit inure to the benefit of the retail merchant rather than to the jobber is owing to the uncompromising rivalry between our leading millinery houses, and this rivalry has made Chicago the best market in the world in which to buy millinery. This competition is so keen that smaller concerns have little chance of obtaining any foothold, and this has been demonstrated by the fact that during the past twenty-five years about twenty-five firms

have gone under in the effort to establish themselves here. The houses that have held command of the trade are strong in every sense of the word; strong in financial resources, and managed by energetic, keen, experienced business men, who have grown up themselves with and in the Millinery trade of the Northwest.

It is difficult to overestimate the importance to this city of the Millinery manufacturing interest, engaging as it does the services of thousands of girls and women, who receives relatively higher wages than any other class of female labor.

There are, as we have stated, three distinctively leading houses in this line of business, besides a number of smaller firms, for the most part engaged in dealing in specialties connected with the various departments of the trade. The following are the most conservative and reliable estimates of the volume of business and the amount of capital involved.

The three leading houses employ a capital of nearly $2,000,000, with annual sales close upon $7,000,000. The other establishments transact a business of $700,000, on a capital estimated at $250,000. These figures do not by any means comprise the entire sales of Millinery goods in Chicago. The wholesale dry goods houses have encroached largely on this trade, dealing in Ribbons, Velvets, Satins, Silks, etc., which will bring the total sales of Millinery Goods in Chicago to at least *Ten Million Dollars, annually.* But as large figures do not always convey a definite idea of the magnitude of a business, it will be instructive to glance at the territory supplied from Chicago as a centre.

This includes every State and Territory west of the Mississippi, while to the east of the river, every State north of Tennessee, and west of Pennsylvania, obtains its supplies almost exclusively from the Chicago market. There is probably no other interest in the city that is so

extended in its ramifications as that of Millinery. The commercial travelers of the Millinery houses are the pioneers of Chicago trade, and are always reaching out for more territory to conquer. As already shown, the spirited competition here compels the merchants to place prices low, and it is no exaggeration to assert that the prices rule lower in Chicago than in any other market in the country. The Chicago Millinery trade is of natural growth, fostered and developed by legitimate means and methods. It has been built upon solid foundations, and will continue to hold the supremacy it now enjoys over that of all other cities on the continent.

In conclusion we add a few remarks regarding the special features pertaining to each of the three large houses to whom reference has already been made.

A. S. Gage & Co. was established in 1856, under the firm name of Webster & Gage, and is, consequently, one of the oldest houses in this line of business in the Northwest. The following is a list of the various departments of the house, which will be found to comprise everything usually carried by a first-class wholesale Millinery, Notions, and Fancy Dry Goods establishment.

Ribbons,	Notions,	White Goods,
Silks,	Wools,	Hats,
Satins,	Yarns,	Bonnets,
Velvet,	Zephyrs,	Frames,
Laces,	Buttons,	Feathers,
Crape,	Hosiery,	Flowers,
Ornaments,	Gloves,	Cloaks,
Cashmeres,	Corsets,	Blankets,
Ginghams,		Flannels,
Ladies' Furnishing Goods,		Gents' Furnishing Goods.

In addition they are large manufacturers of Ladies' Hats, Bonnets and Hat frames, and all goods of this class. The manufacture of Corsets is also one of the leading features of their business, their capacity for producing these

exceeding seventy-five dozen per day. Besides corsets of their own manufacture, they make a point of carrying in stock a full line of every make of Corset that has in any way met with the approval of the trade and the public. This Corset stock alone occupies an entire floor of 45x175 feet, and the boxes are piled up to a height of ten or twelve feet over the entire space. This is by far the largest stock of Corsets that is carried by any one house in America. It is a fact that 75,000 women could be supplied with Corsets at one time from this stock.

The store occupied by this firm, at the corner of Wabash avenue and Adams street, was built by the special partner of the house particularly and expressly for their use, and is conceded by all to be the finest mercantile building of its size in the United States, and it contains more square feet of available space than any wholesale millinery house in the world.

While each department of this establishment is under the management of a fully qualified and experienced buyer, the entire business is conducted under the personal control and supervision of Mr. A. S. Gage, and his systematic management, conspicuous enterprise, and promptitude in all transactions, makes this more than a desirable house with which to cultivate pleasant and profitable relations.

D. B. Fisk & Co. was the first firm to engage in the wholesale Millinery business in Chicago, and indeed in the Northwest. The house commenced operations in 1853, or thirty-one years ago, and during its entire career it has confined its business strictly to such goods as are handled in stores conducted by ladies.

The firm own and occupy a fine building; comprising six floors, with a frontage on Wabash avenue of 144 feet and on Washington street of 152 feet. They have an exten-

sive manufactory for the production of Hats, Bonnets, Frames, etc., and their stock includes everything pertaining properly to the Millinery business. As the pioneer house in this line, it has become indissolubly connected with the advancement of Chicago and the development of its commercial interests.

Edson, Keith & Co. are the successors of Keith Bros., and O. R. Keith & Co., established in 1858. They occupy one of the finest of the grand buildings for which Chicago is noted, it has a frontage on Wabash avenue of 160 feet, and 172 feet on Monroe street. The entire building, consisting of five stories and basement, is used exclusively for the purpose of handling and selling goods, the manufacturing interests of the house having other locations. As will be seen from the following list of departments, these goods comprise a great variety of lines which the difficulty of classification necessitates our giving in full.

DEPARTMENTS.

Millinery,	Corsets,	Woolens,
Straw Goods,	Gloves,	Flannels,
Silks,	Shawls,	Worsteds,
Satins,	Suits,	Yarns,
Laces,	Cloaks,	Zephyrs,
Ribbons,	Furs,	Hats,
Flowers,	White Goods,	Caps,
Feathers,	Hosiery,	Men's Furnishings,
Ornaments,	Linens,	Notions.

CLOTHING.

WHOLESALE AND MANUFACTURING.

No other city in the United States distributes so much ready-made clothing directly to the retail trade as does Chicago, while in the amount and variety of goods manufactured, it is second only to New York.

The competition here is intense, since there are ten enormous houses, ten whose lesser though still immense business, places them in the second rank, and perhaps fifteen still smaller establishments, all of which are straining every nerve to gain or keep the lead among their rivals. Indeed, so close is the struggle, that prices have been reduced to a margin of profit which would horrify other branches of the wholesale trade, while, in addition to this, each dealer resorts to an endless variety of expedients to retain and increase his trade, not unfrequently offering inducements in special lines, which if equaled in all, would speedily place him in the hands of his creditors. As nearly as can be learned, and probably within a few thousand of the exact truth, the capital thus employed amounts to $10,000,000, which is so turned as to result in an annual production and sale of $25,000,000.

Of the goods sold, by far the largest portion is manufactured in this city; 30,000 hands thus finding employment, though a small per cent. of this number habitually work at other trades, devoting their time to this line only when they would otherwise be unemployed.

Of this army of work people, men are in a large majority, and as most of the employes work by the piece, it is difficult to give figures definite as to the wages received, varying as they do with the individual, though somewhere between $5 and $30 per week. It is almost superfluous to add, that as this business does not require skilled workmen, labor is cheap and of necessity cheaper in a large than in a smaller city. Especially is this the case in Chicago, ever overflowing with wage seekers, thousands of whom have learned to regard as a great boon the opportunities offered by this industry.

The houses here command the entire trade of the West and Northwest, while shipping their goods to every considerable village in the South, this market extending through so many climates, compelling dealers to carry varied and prodigious stocks. The style, quality and general standard of goods has vastly improved within the past few years, indeed no better are anywhere made, while there is reason to believe that the general average of workmanship and material is above that of other cities, owing in part to the fact that the bulk of the trade supplied demands special attention to cutting and trimming, and an excellence, even elegance, of make-up; while the garment must none the less be servicable, and adapted to the climate and work for which it was designed. How true this is will be seen by the fact that Chicago, with the reputation among traveling men of being the best and most fashionably dressed city, purchases nineteen-twentieths of her wearing apparel ready-made from her own manufacturers.

Some firms here have built up a wide reputation for especial excellence in their work, as for example, the firm of Barbe Brothers, who have been closely identified with this great interest in Chicago for the past thirty-five years. They cover the entire line of the clothing business, manu-

facturing all classes of these goods on a very extensive scale, and handling also the goods of the best Eastern manufacturers. In fact, all that is desirable, serviceable and fashionable, is embraced in their stock. With their great facilities and their enterprising and energetic methods of transacting business, they have pushed their trade into every section of the country tributary to this city.

HATS AND CAPS.

This interest, which is of growing importance, already engages a capital of $2,000,000, producing and marketing goods valued at more than three times that amount. The business is divided among twelve houses, each of which finds employment for many men.

The area supplied from this center is unusually large, even for Chicago houses, extending, as it does, from Toledo to San Francisco, as well as to the far South, while the opening of new lines of travel through the Territories has given a notable impetus to the trade of this city.

This is in a measure due to the class of goods demanded by these regions, which, strange to say, always require the best and most expensive articles obtainable, goods which will endure for the longest time sun and storm, and the hardest kind of usage.

The trade with the South is another special feature, monopolized by a few firms, which have developed extraordinary facilities for supplying the cheaper, lighter woolen hats most extensively used.

An important item of the business is the manufacture of silk hats, some styles of which have acquired so great a renown that jobbers often find it difficult to fill their orders. 1883 showed an increase of ten per cent. over the trade of the previous year, while thus far in 1884 the business in this branch exhibits a gain of twenty per cent.—even more being claimed by some of the firms—a very gratifying result,

when we remember that experience has proved each advance to be permanent, and every newly acquired dealer a customer for life.

Edson Keith & Co., the successors of Keith Bros. and O. R. Keith & Co., are probably the largest wholesale dealers in Hats and Caps in Chicago. Their business is, however, by no means confined to this one line, as a reference to our chapter on Millinery, and a glance at the various departments of the house will demonstrate.

CLOAKS.

MANUFACTURING.

If a stranger should apply for information regarding the Cloak manufacturing establishments of this city, to some man who was thoroughly informed, though not himself engaged in this particular line, and consequently unprejudiced, and if he should ask him to name the leading characteristics of the firms in this branch of business—the qualities to which more than any others they owe their eminence and success—the informant would, in all likelihood, give the question a moment's consideration and then reply—at least nine out of ten would give substantially the same answer—that the success of these concerns was directly traceable to their enterprise and their integrity. The questioner might at first feel inclined to respond that "enterprise and integrity" covered a great deal of ground, and that the prosperity of every other branch of business was more or less dependent on the possession of these qualities. This is true, in a great measure, but still it required in this case, an enterprise phenomenal even in Chicago, since our firms encountered from the very start the most terrific opposition in the competition of the immense Eastern houses, which had so long controlled the trade of the country that they were firmly rooted in every city in the United States, and had practically unbounded wealth with which to carry on a losing fight for years if necessary. How well the Chicago manufacturers have succeeded is shown by the fact that they now control the broadest area of territory supplied by any city,

sending their goods as far eastward as the Pennsylvania line, thus crowding the seaport manufacturers out of some of the richest States; while to the westward, Chicago houses have now a free field to the very shore of the Pacific ocean.

A word now in reference to the "integrity" of which we made mention as the second factor in compelling their remarkable success. By this we do not simply mean that these manufacturers do as they agree, and pay their debts when due. But we mean that they carry on every detail of their vast business with the same scrupulous and conscien tious endeavor to do the best work, and to use the best material which it is possible to obtain. Not only are their goods outwardly and apparently equal to the best, but the hidden material and the work not open to inspection are just what they purport to be, and this is the universal rule, and both a matter of pride and of policy with every Chicago manufacturer in this line. It is this uniform policy of honesty, this integrity of goods, and methods, and dealing, which enabled our houses to supplant and drive out the Eastern manufacturers from every city where they have met on neutral ground, and fairly brought their goods into competition.

But facts and figures are always more convincing than verbal statements, and to the cold logic of statistics, we will leave the remainder of this article, and the proof of our previous assertions.

Twelve years ago Chicago could boast of but one house in this line; now she has twenty, many of them vast establishments with wide-awake agents on the road in every State in the South and West. Of the capital invested, we will not undertake to give an estimate, which might possibly be misleading, as there are no means of definitely ascertaining it up to date. Still, as will be readily seen, it must of necessity be immense, owing to the enormous stocks which the firms are compelled to carry ever on hand. When we

come to consider the number of workmen we can make a very close approximation, and that is, that this line gives employment to 5,000 hands, and bringing into use 3,000 machines. The amount expended annually in wages is in the neighborhood of $2,000,000, while the yearly outfit of finished goods is valued at five times as much, or $10,000,000. Even in the most panicy and disastrous years of the past decade, these firms have more than held their own, even gaining ground in periods of greatest depression, a fact which speaks volumes for the worth of the goods, since in times when retrenchment is necessary, people are always slowest to sacrifice those articles whose need they constantly feel, and whose utility and value they have abundantly demonstrated.

The leading houses in this line in Chicago are:

J. W. Griswold & Co.

Beifield Bros.

Hotchkin, Palmer & Co.

F. Siegel & Bros.

BOOTS AND SHOES.

WHOLESALE AND MANUFACTURING.

During the past decade, this interest has exhibited a steady and persistent growth which places Chicago at the head of American cities, as the greatest producing and distributing center. The business is divided into two branches, manufacturing and jobbing, though most of the larger houses combine them both. Its importance can perhaps best be shown by a glance at the following figures, which are based on the best estimates obtainable, and will be found reliable:

The capital engaged in houses which both manufacture and job their products is $5,500,000; while their annual production and sales amount to $22,000,000. The firms which devote their energies to manufacturing only, have plants in which $500,000 is invested, and each year put on the market goods to the value of $2,000,000. The jobbing houses proper do business on a capital of $350,000; their annual sales being in the neighborhood of $1,400,000.

It will thus be seen that the total capital engaged in this industry is $6,350,000, while the aggregate yearly sales and output of manufactured articles amounts to $25,400,000, a showing which no other city of the Union can equal.

The number of hands employed in this branch of trade varies a trifle with the season, but the average number of workmen, in which the clerical force is not included, may be safely placed at 4,550. These employes earn each year $2,400,000, or average wages of $1.74 per day. It

should also be noted that many of the firms under contracts with Western prisons are large employers of convict labor; a system in regard to which there has long been an irreconcilable, uncomprising conflict of opinion. Yet whatever be its economic effect on labor and the country at large, it certainly results to the advantage of retail dealers, and furnishes the masses of the people with cheaper shoes, a better and more durable class of goods than was ever before obtainable for the same amount of money.

A word may be said in reference to the variety and relative excellence of the goods here manufactured. In former years only the cheaper grades were placed upon the market, the jobbers relying on the Eastern manufactories for goods of finer quality and workmanship. This, however, was long since changed by the introduction of costly plants and the most skillful workmen, until now every variety, from the cheapest and strongest to the most elegant and expensive, are both manufactured here and carried in stock. The demand for goods of superior quality and finish can not as yet be wholly supplied at home. For a portion of these we still look to the older establishments of the East, who make more goods especially for this market than for any other city in the country. Nowhere, however, is the claim made that the products of Eastern manufactories can excel our own, since our manufacturers are continually turning out shoes, which for strength, elegance and sterling qualities, are displacing those of custom make, and driving the smaller shoemakers to cobbling. Ladies' shoes in particular have long been made a specialty, while some of our firms have gained a reputation almost world wide, by the introduction of the most durable and universally popular children's shoe ever put upon the market.

The annual production of fine leather is also an item of considerable importance, amounting, as it does, to $5,000,000,

fully one-half of which is worked up here, thus saving to our dealers the cost of double transportation. Cheap leather for uppers, however, is shipped from here in large quantities.

As would be naturally expected with so many powerful and enterprising firms engaged in business, the competition is most intense, and has cut down the margin of profit to a point which nothing but the immense extent of their sales could warrant. None the less is this rivalry apparent in the conduct of jobbing houses, all of whom vie with one another in keeping on hand the largest and most attractive stocks, though this has come to be a necessity with firms which aim to supply the demands of every section of the country. In one thing, however, they all work together, and that is to maintain the reputation of their city as the cheapest market in the country for boots and shoes; the cheapness of leather, the extent of their transactions, and the facilities for shipping, seconding them materially in their determined effort to undersell all other manufacturers both East and West. Among the principal houses engaged in this line are:

M. D. Wells & Co.
Phelps, Dodge & Palmer.
C. M. Henderson & Co.
Charles H. Fargo & Co.
Doggett, Bassett & Hills Co.

GROCERIES.

If the class of goods which passes through the hands of wholesale grocers was conveyed to the consumer over the water ways of the country, thesupremacy of Chicago as the great inland distributing point might be questioned. This, however, is not the case; the broad-breasted Mississippi floats not one-tenth the traffic which crosses it on a single spanning bridge; nor do all the rivers in the land bear to and from the sea as much of the table luxuries of modern civilization as are carried yearly to Chicago on her hundred railroads.

These incomparable railway facilities have made our city what she confessedly is, the second largest point in the United States for the distribution of groceries; indeed, there is one firm here, the variety and extent of whose transactions are exceeded only by those of the leading house in New York city, admittedly the greatest on this continent.

The best attainable estimates place the total amount of capital invested in this city in wholesale groceries at $10,000,000, on which the annual sales are in excess of $60,000,000.

The past few years have also witnessed an immense extension of the territory supplied by Chicago jobbers, owing no less to the phenomenal development of the West than the energetic policy and the eager competition of the foremost houses, which have led them to go far abroad for business, and canvass even the remotest towns. During the

year now closing the tendencies of trade have been both marked and unusual. There has been a notable decline in prices, and the demand for fancy groceries and table luxuries of every description has undergone a steady and remarkable increase.

The decline of prices is indicative of the business rivalry, and consequent lowering of profit margins, which must result eventually in strengthening the more staple establishments, and driving the weaker into retail trade or other fields of commercial enterprise.

The increasing demand for fancy groceries is evidence, also, of the growing wealth of the people, as well as of the great popularity of the products of the great fruit, meat and vegetable companies.

To supply this demand and at the same time preserve the standard of excellence, which alone secures a steady and profitable trade in this line, some of the larger grocery houses have established factories for the production of these goods in those sections of country where the raw material in its best state, can be most readily obtained, and of which special lines of goods without a brand on which reliability can always be placed, no great jobbing house is now considered complete.

To illustrate, the firm of Sprague, Warner & Co., the firm already alluded to as the second largest grocery house in the United States, have established at Batavia, N. Y., the now widely known Batavia Preserving Co., handling its entire products; the quality of fruits and vegetables for canning grown in this part of New York State being unexcelled anywhere on this continent. At Chicago the Great Western Canning Co., its specially prepared meats being shipped throughout the entire West, Northwest and Southwest, as well as a number of other lines of goods handled by them in large quantities, including a fish house where dried and preserved fish are inspected and re-packed.

Gordon & Dilworth of New York, who deal in jellies and preserves; Dumbois Sons of New Orleans among the largest dealers in semi-tropical products, Figs, Gulf Shrimps, Green Turtle, etc. The San Jose Preserving Co. of California, ship also the bulk of their output to them for distribution.

Imported Pickles and Condiments, French Delicacies, Dried Fruits, Oils, Chocolates, Flavoring Extracts, Spices, Coffees, Baking Powders, etc.; Fine and Fancy Biscuits, Confections, and every species of Home and Foreign Nuts, of all of which Chicago jobbers are forced by the keenness of competition to carry continually enormous stocks, are either purchased, imported, or prepared expressly.

Tobacco is handled in immense quantities, and though the city can boast of little manufacturing, all of the prominent factories in the country are represented by branch houses or agencies.

To conclude, the stock of both Staple and Fancy Groceries carried by our Chicago houses is the equal for completeness and quality of any in the world, while in quantity, with the exception perhaps of New York, it is by far the largest on the continent.

ARTIFICIAL LIMBS.

Chicago, by reason of the large area of country for which she forms the basis of supplies, does a business in the manufacturing of Artificial Limbs as large as that of any city in the Union, and has acquired a celebrity for the excellence of the work produced here. There are five concerns engaged in this line of manufacture, and their aggregate annual product exceeds $40,000 in value.

Probably the most prominent of these is C. L. Tate, of No. 89 Randolph street, whose goods are widely known and justly celebrated, not only for their great durability, but, also for their superior workmanship and the high quality of all the material used in their manufacture, thus insuring the most desirable qualifications of durability, utility and comfort.

Mr. Tate is agent in Chicago for the sale of Kolbe's patent arms. It is only necessary to add that the fitting and indeed the entire manufacture of these goods receives his personal attention and care.

All modern inventions and additions to secure comfort are quickly adopted here, and the ever increasing demand from the great West leads to strong competition, and keeps prices at the lowest point at which the goods can be manufactured.

ANIMAL VACCINE.

The production and distribution of *Cow Pox Virus*, is one of the industries of importance in Chicago not employing many laborers or a very large capital, yet Chicago takes the lead of every city in the Union, owing to the facilities here enjoyed for the work, which are unsurpassed, and its natural geographical position as the distributing point of the continent.

These facts, led in the spring of 1881 to the consolidation of the two then largest establishments in the country and their removal hither, where, under the corporate name of "The National Union Vaccine Company," they have ever since maintained extensive stables in close proximity to the city. These stables are the most perfect of any in the world, having a capacity to meet any emergency which may arise for an unusually large supply of virus, by reason of prevalence of small pox.

Their office for the distribution of virus is located in the Quincy Building, at the corner of Clark and Adams streets, directly opposite the Post Office, and in the immediate neighborhood of railroad and express depots.

The material prepared by this establishment finds a sale not only throughout this country, but in Mexico, South America and Europe as well.

The perfection reached in the arrangement of all departments and details of the business, is such, especially in the methods of preparing the virus, as to secure perfect purity in all cases.

DRUGS AND CHEMICALS.

Chicago has been for some time the center of the jobbing trade of this country in drugs, chemicals and medicinal goods. This is owing, as will be readily seen, to its central geographical position, from which arises the fact, and a very important one, that so many consumers in so many towns and cities of the United States can order goods from Chicago and receive them with the loss of the least time. Since goods in this line are rarely bulky, and hundreds of dollars may often be invested in a few pounds weight "freight discrimination," which shut our jobbers in other lines out of certain fields, do not operate to the disadvantage of our wholesale dealers in drugs and chemicals, and being thus placed on an even footing with any of her rivals Chicago enterprise has won the day. During the past year or two the most marked tendency of the trade has been to curtail expenditure, avoid reckless speculation, guard with greater care against loss from bad debts, and in other ways to do business on a surer basis. This policy of prudent retrenchment enables jobbers to conduct business on a narrower margin, since they are not compelled to make so much allowance for the possibility of failure, nevertheless the territory supplied from this city has been materially enlarged; Montana, Idaho, Washington and Oregon, as well as the Southwestern Territories, New Mexico and Arizona, are now in a great measure controlled by our jobbers, among whom competition has been, if anything, keener than heretofore, since

they seem to have been acting on a common impulse, and to have shortened sail in one direction, in order to devote additional energy to the acquisition of new markets and the opening of new fields.

There is no doubt but that our wholesale houses will compare favorably with any in the world, not only as to the volume of trade, but in the magnitude of the structures, the extent of their stocks and the system and completeness with which their business is conducted. Some of the largest establishments had their birth in days when Chicago was a struggling village, and have kept pace with her in their growth to commensurate greatness. They now have representatives in every part of the tributary territory, who are each day notified as to the condition of the drug market, and who in their turn apprise the retail druggist of the state of affairs.

The market this year has been active, the slight decline of 1882–83 having been checked, and the volume of trade being somewhat in excess of previous years, In the absence of complete statistics for 1884, we can approximate with all requisite accuracy, to the amount of the year's business, which it is estimated will aggregate $8,000,000. This business is now in the hands of seven large concerns, working on a capital of $1,750,000.

While there has been an occasional advance in the price of particular commodities, the staples have tended with fluctuations to stability at lower prices. This has been owing to many causes: reduction of import duties, as in the case of lemon oil, and an increase in manufacturing facilities, as in the case of sulphur, and some other chemicals.

We must not forget to mention the notable increase in the transactions of Commission Agents and Drug Brokers, directly representing Eastern importers, and Eastern and foreign manufacturers, for whom they frequently carry large

stocks of specialties. These sales have during the year now closing, exceeded a million of dollars, a figure not heretofore equaled.

The leading drug houses of Chicago, are:

Fuller & Fuller.

Morrisson, Plummer & Co.

Lord, Owen & Co.

Chicago Drug & Chemical Co.

JEWELRY.

DIAMONDS, WATCHES AND SILVERWARE.

Among the many prominent interests in Chicago few are of greater magnitude than that of jewelry; indeed its growth within the past decade is so great as to almost stagger belief. It is not many years since the Chicago houses in this line of business were exclusively retail, and the manufacturing — if such it might be called — was limited to repairing a timepiece, or mending a broken ornament. In short this branch of trade was represented in this city about as it still is in a hundred petty cities throughout the country. Such a state of affairs, however, was necessarily of short duration. We had merchants sharp enough to see, and energetic enough to take advantage of the opening offered in this direction. Jewelers who knew the needs of the West, its fondness for novelty, solidity, costliness and display, soon discovered the promise of profit in supplying the still more Westward merchants with goods in certain lines, and thus in a modest way sprang up that jobbing trade which has since assumed such enormous proportions.

These fortunate first houses met with immediate and continued success, others joined in the race, and the competition between them was so keen, the rivalry was so fierce, so unrelenting, that in a short time the whole world was placed under contribution for ornamental novelties. All the neighboring and Western states looked to this city as the best of all markets in which to purchase their stocks, and manufacturers in the East were stimulated vastly by the

constant demand for the new, the unique, the exquisite in this line of goods. Then it was that a home firm of well known pluck and shrewdness, came to the conclusion that with the proper plant and imported artisans, Chicago manufacturers might supply, in part at least, the home market, and in certain selected lines to equal the choicest products of Eastern cities. It was clearly understood, however, that the East enjoyed the immense advantage in the wide celebrity of its goods and the widely prevalent opinion that no work of special elegance or artistic merit could be fashioned so far from the well known centres of the trade. This impression could be counteracted in only one way, and that was by placing on the market a line of goods whose undeniable superiority in design, utility and finish, should settle forever the possibility of successful competition. To effect this the question of expense must be treated as a secondary consideration—the most successful designers must be secured at whatever cost, the best mechanical appliances and the most skillful workmen must be imported from the East or the old world.

How well this bold plan succeeded, and how successfully the business has since been conducted on this principle of getting the best of everything, men, material, and methods, is well known to the trade, and has been abundantly demonstrated by the unbroken success of the pioneer establishments. The Jewelry manufacturing interest in this city now engages capital to the extent of $400,000, while the jobbing interest is more than ten times as great, the most exact estimates placing its capital at over four million of dollars. On this vast sum they did a business last year of ten millions, a falling off of twenty-five per cent. on the business of the year before, but as it was due entirely to the general depression in all branches of industry, will probably be more than regained within a few seasons to come.

In manufacturing, the only goods placed on the market here in any considerable quantities are of gold and silver, and superior both in quality and workmanship. The cheap goods are turned out exclusively by the vast beehive factories of the East, where human machines are schooled to manipulate machines of iron, and both together to turn out so many thousand gross in a given time—a method, which by making the workman an automaton, is no less destructive to him than to all art and individuality in his calling. It is all but superfluous to add, that undesirable as they are, these goods of Eastern make continually depress the prices of the better class of goods, and hence Chicago prices are always as low as consistent with the quality of the wares. The home competition between the jobbers is also so intense, that all of the larger houses, without exception, are compelled to carry immense and excellently assorted stocks, full lines of every quality and manufacture, which afford the buyer unrivaled opportunities.

Diamonds form one of the most important features of the jewelry business here, and with the single exception of New York City, there are more diamonds sold in Chicago than in any other city in the United States. As a consequence of the great demand for, and the enormous quantities of these goods handled here, Chicago ranks as an exceptionally good market in which to purchase these popular gems.

There are many reasons which tend to induce successful business men to prefer purchasing diamonds rather than any other article of personal adornment. In the first place, money so laid out is invested in an imperishable security, and though it may not bring any yearly interest, neither will it deteriorate in value; again, it can always be realized on, as diamonds are decidedly the most staple article connected with the jewelry trade, and are marketable at a fair

price at any time. For these reasons they are an exceedingly popular investment, particularly throughout the Western States, which creates an enormous demand for them, which is supplied by the Chicago merchants.

A somewhat novel method of bringing the jewelry buyers of the great West into closer relations with the manufacturers of Chicago, without incurring the great expense of cemmercial travelers, was introduced here in 1855 by the firm of E. V. Roddin & Co., and it is a plan that has since been very generally adopted in the trade.

Their system is to publish each succeeding year an illustrated and descriptive catalogue, which is mailed to any address upon application by letter, and which contains designs and patterns of all articles of jewelry, with the quality and weight of the gold or silver, and the price of each individual article. For instance, in their catalogue for 1885 there are a dozen pages devoted to the display of diamond rings, ear-rings, studs, and scarf and lace pins; each of these not only shows the pattern of the gold work and setting, but also displays the weight and size of the diamonds. As they import the stones direct from the principal European diamond markets and mount them in their own factory, they are able to insure the purchaser, who orders simply from the illustration, an exact fac simile of the pattern selected. The same is true of all other articles in the catalogue, in gold and silver watches, the most beautiful and intricate designs, engraved on the watch cases, all shown exactly as they appear on the watches themselves, while the quality of the gold and weight of the cases is clearly marked against each. In the same way the various works or movements are designated, and of these the popular "Elgin" is awarded the greater space, though the "Waltham" also comes in for a large share of attention. There are innumerable patterns of vest chains, ladies' chains,

rings, bracelets of solid gold, and of silver, and rolled gold; besides plated silver-ware of elegant designs and great variety. Indeed this catalogue, which contains two hundred pages, is illustrated with nearly every article in the jewelry and silver-ware trade, and the work is executed in such a careful and elaborate manner that the same idea is conveyed as in inspecting the goods themselves. It will thus be seen that the purchaser having this catalogue on hand can sell jewelry of every kind without carrying a single article in stock, and these catalogues will always be sent in response to a request by mail.

The importance to the buyer of this direct and economical manner of effecting sales can scarcely be overestimated. By this means all the expense of traveling agents is saved, and one *uniform price and discount is assured to all, without regard to the size of the order.* Every effort is also made to protect customers; if a regular purchaser desires to have the exclusive privilege of handling these goods, on his application the firm will decline to send a catalogue or sell goods to any other in the same town. This system may be said, since its introduction, to have revolutionized the Jewelry trade in Chicago, and some idea of the immensity of the trade it has created is shown in the fact, that during the year 1884, E. V. Roddin & Co. received and filled over *thirty-five thousand* different orders by mail, as a direct result of this method. Its advantages are that it brings the goods of the manufacturer to the door of the purchaser, that it saves all intermediate expenses, profits and commissions, and that by its means the purchaser in Texas, Arizona or the Pacific coast can order as intelligently, and with as much confidence as though he was selecting from stock.

It is scarcely necessary to add that a business of this character and magnitude could only be conducted by a firm of the highest standing and with facilities of the very highest order.

LUMBER.

With the purpose of giving an accurate and full account of this mportant interest, the following article has been written and carefully revised by MR. GEORGE W. HOTCHKISS, the efficient Secretary of the Lumberman's Exchange.

In contemplating the lumber trade of a city which receives 212,100,000,000 feet in one year, handling in the aggregate nearly two and one-half billions of feet as the total trade of the year, without including nearly 1,100,000,000 shingles and 104,000,000 lath, adding at least 200,000,000 feet to the gross total, it is eminently proper that we should review the early history of a business which has grown to such proportions as to represent not far from $60,000,000 of invested capital. While Chicago was, fully eighty years ago, an outpost of the advancing civilization of the American Continent, it was not until 1830 and subsequent thereto that the small stream at the mouth of which Fort Dearborn was erected as a menace to the Indians who occupied the entire country, became at all attractive to white men, or held out to them any inducements for settlement. That year, in fact, may be assumed as the beginning of the city, which has in fifty years increased to such mammoth proportions.

It was not known until the use of, and demand for, lumber by the settlers on the rich bottom lands of the Wabash and the fertile prairie lands of Illinois—a demand extending to the wants of the early settlers on the banks of the

Mississippi—that the little hamlet yclept Chicago began to show any signs of vigorous growth. But as soon as the liberality of the General Government responded to the demands of the few but far-sighted pioneer settlers, in the building of a pier which should form a shelter for vessels, and thus enable commerce to visit the river, a constant accretion of population was apparent, and, in 1834, Capt. Carver laid the foundation for the present vast lumber industry of Chicago, by opening a lumber-yard on the bank of the river, near where is now located the State street bridge. Up to this time, no record can be had of any systematic attempt to establish a lumber-yard, or to provide lumber for this region of country, other than by the use of the broad axe or the whip-saw. The north side of the river was a fairly well-timbered tract, and it is probable that from the white-wood which grew in the immediate neighborhood of the mouth of the river, the lumber requisite for the use of the earlier settlers was manufactured by means of a pit-saw. As all the earlier buildings of Chicago were log houses, but little lumber was requisite in their construction. With the completion of the pier, however, Capt. Carver began to run a small schooner called "General Harrison" to different points on the lake, and, in 1834, is credited with bringing a cargo of about 40,000 feet of lumber from a mill which had been established at St. Joseph, Mich. As the harbor was not yet sufficiently advanced to allow the vessel to enter the river, her cargo was landed on the beach in a raft. This was the pioneer enterprise, which in forty-seven years has culminated in the immense lumber trade which has now developed. About this period, or perhaps a year or two later (the statistical data of the period in question being very imperfect), a wind saw-mill was put in operation near the site of the present Kinzie street bridge, but its accomplishments did not entitle it to a prominent place in history. In 1836, a pocket

saw-mill, with one upright saw, the pitman of which was connected direct with the piston of the small steam engine which ran it, was erected on the North Branch of the river, near the present Chicago avenue bridge, by a man named Huntoon. Its daily cut did not exceed 2,000 feet of lumber, but it was a great curiosity to the inhabitants of the surrounding country, and for a year or two proved of very great usefulness to them. In the fall of 1834 or spring of 1835 (the weight of evidence being in favor of the latter date) Capt. Carver, finding that his little craft could now enter the river—the bar at the mouth having been swept away by a freshet—brought in another cargo of lumber, which he landed at a temporary dock which he constructed just west of the State street bridge, and from this time forward the lumber trade of Chicago was of constantly increasing proportions. Capt. Carver continued to do a lumber business until, in 1839, he sold out to George W. Snow, who continued for many years at the same locality. This yard was without a competitor in the business, until, probably, 1838 or 1839, when the firm of H. Norton & Co. was established, with a yard about one block to the east of Snow's yard, or near the present Rush street bridge. In 1840, the New York & Lake Michigan Lumber Co. was established, with John H. Kinzie as manager, and the trade began to be one of great importance, yards multiplying with rapidity, and in keeping with the increased population, which by this time was taking possession of the then far West, and the best estimates attainable place the volume of trade in 1843 at 12,000,000 feet. Succeeding the enterprise of Carver and the New York & Lake Michigan Co., so many yards were established that it is at this day impossible, in the absence of authentic records, to classify them in proper order. We may, however, mention as among the earlier lumber dealers of Chicago the names of L. P. Hillard,

George M. Higginson, F. Rossiter, Barber & Mason, J. M. Underwood, Sylvester Lind, Robert Dunlap, George Roberts, B. W. Thomas, Throop & Wait, W. M. Ferry, D. R. Holt, C. N. & A. H. Holden, —— Ely, —— Wing and Russell Green. Some of these gentlemen are still living and doing business in Chicago, although none (with the exception of Mr. Holt) are still engaged in the lumber trade, unless we except the firm of Ferry Brothers, who still represent the business established by W. M. Ferry. Reaching the year 1850, however, we find that there had been established and were then in operation no less than thirty-five yards, operated by the following-named gentlemen and firms:

J. P. Allen,	L. Morton,	Higginson & Co.,
J. Barker,	G. R. Roberts,	Hoit & Lackley,
Butler & Norton,	F. B. Stockbridge,	J. Johnson,
F. Clark,	Thomas & Co.,	S. H. Kerfoot,
J. M. Dalton,	Walker, Day & Smith,	Lind & Smith,
T. DeWolf,	N. Squires,	N. & C. H. Mears,
Hannah, Lay & Co.,	J. C. Baldwin,	A. & G. L. Norton,
L. P. Hilliard,	Jacob Beidler,	A. Smith,
James & Hammond,	O. G. Butts,	E. C. Stowell,
T. Jones,	P. Crawford.	A. G. Throop & Bro.,
Leonard & Marsh,	H. Dunlap,	J. Wilde,
W. Lull,	W. M. Ferry,	Holt & Mason.

Many of these names will be recognized among the operators of to-day, while others have handed the business over to their sons, and the names do not drop out of the record. Notably, we may call attention to the venerable Jacob Beidler, who is still represented by the J. Beidler Bros. Lumber Co.; to Ferry Bros., who succeeded to the business of W. M. Ferry; to Hannah, Lay & Co., and to N. & C. H. Mears, who still handle yearly a quantity of lumber equal to more than one-half the entire receipts of Chicago in 1847.

From 1850, down to a very recent date, no positive or

authentic record of the names of those engaged in the trade has been perpetuated, the only records which did exist having gone the way of so many other valuable records of the city in the great fire of 1871.

The statistical tables which we present herewith, however, are the best evidence in the world that the ranks of the lumber dealers did not diminish, each year adding to their number until the present time, when, as will be seen by the record with which this work is so replete, the trade of 1881 comprised about one hundred and eighty-two individual dealers and firms.

The history of the lumber trade is the history of the city. From Capt. Carver's temporary dock near the mouth of the river, the lumber men have improved the river front, not only on the main stream, but on both the North and South Branches, in advance of any other class of business men, developing enterprise and a far-sighted appreciation of the rapidity with which the city was increasing, and its trade extending, and setting an example to all who required the advantages of river frontage, by their willingness still to push on farther and yet farther up the stream. The growth of the city is very largely the effect and outgrowth of the lumber business. Until a lumber-yard was established, no inducements could be held out to the settlers in the interior, to journey over trackless prairies to a little hamlet whose advantages for trade and traffic were scarcely if at all better than those enjoyed at many a point nearer to their homes. But lumber was a great necessity, and when lumber could be had at Chicago, there was an inducement to drive with the ox-teams which drew the vehicles of those days, almost to the exclusion of horses, even from the Valley of the Mississippi and the bottom lands of the Wabash. And in undertaking a long journey to obtain lumber, each farmer judiciously loaded his wagon with farm products to be sold

or exchanged, and thus arose the vast trade which has made Chicago not only the greatest lumber market of the world, but the dictator of the values which rule the grain and provision markets of all nations. As stated, no reliable or tangible statistical records of the extent of the lumber trade of Chicago can be given prior to 1847, since which time we are enabled to point to a constantly increasing business, as represented by the accompanying statistics. Indeed, the business had, in the years 1856 and 1857, assumed such mammoth proportions, aggregating in each of those years not far from 450,000,000 feet, that the gentlemen then engaged in the trade at Chicago felt the necessity of some organization which should, through the authority of the laws of the State, impose upon it some of those restrictions and regulations which were essential to its profitable and successful prosecution. Accordingly, nearly or quite all of them secured membership in the Chicago Board of Trade, which was then in successful operation and was authorized by its charter to regulate the inspection of lumber and matters pertaining to the traffic in all products of the forest, as well as in those to which its attention is at present confined. Among those who thus became members were the firms of Mears & Bates, Hilliard, Howard & Morton, T. M. Avery, Read A. Williams & Co., Hannah, Lay & Co., Fraser & Gillette, Ferry & Sons, John M. Williams, Chapin, Marsh & Foss, Holbrook, Elkins & Co., Jacob Beidler, Pierson & Messer, R. K. Bickford, Artemas Carter, Holt & Mason, Throop, Larned & Co., George E. Scott (representing the firm of S. N. Wilcox & Co.), Frost & Bradley, and some others whose names it is impossible now to recall. All matters pertaining to the lumber trade of the city were, by the officers of the Board of Trade, delegated to the representatives of that branch of business, and these held daily meetings in the afternoon, when the business of the board

regarding all other commodities had ceased. The question of inspection was the most important one, and the one requiring the most attention, and Eli Bates, G. C. Morton, T. M. Avery, R. H. Foss, —— Dickey (representing the firm of Ferry & Sons), and R. K. Bickford, were appointed "Inspection Committee."

This committee spent considerable time in considering the question, and finally delegated the drafting of the rules for inspection to R. K. Bickford and Artemas Carter, who presented a code which was adopted, and with some slight modifications has remained in force, and constitutes the only guide upon that subject which is recognized by the organization of this day. The connection of the lumbermen with the Chicago Board of Trade continued for about two years, when a separate act of incorporation was obtained from the Legislature of the State, for the "Lumbermen's Board of Trade of Chicago," the incorporators being Robert H. Foss, Eli Bates, George C. Morton, T. M. Avery and Read A. Williams. This organization elected, as its first President, Robert H. Foss, with Nathaniel A. Haven as Secretary, opening an exchange room in the Lind Block, at the east end of the Randolph street bridge, holding daily meetings from 10 A. M. until 2 P. M. This was maintained for about two years, during a goodly portion of which time the Secretary, Mr. Haven, published a folio weekly newspaper called the *Lumberman*, devoted principally to the interests of the lumber business, and which, no doubt, was the first journal ever published in that interest. The hard times causing interest in the organization to abate, the trade of 1860 and 1861 being scarcely more than one-half that of 1856, the Lumberman's Board of Trade practically passed out of existence, although that portion of its membership known as the "commission dealers" kept it alive through annually meeting and electing officers, and it thus dragged

out a feeble existence until 1868, being looked upon by a majority of the yard dealers as antagonistic to their interests, as opposed to the interests of the commission trade. As the time drew near for the annual meeting of 1868, however, the commission dealers sent an urgent appeal to the yard dealers to attend that meeting, and enter into an amicable discussion of the advantages and disadvantages to be realized by them in identifying themselves with its membership. The appeal met with much greater favor than the commission men had dared to hope, and resulted in a *coup d'etat* which carried consternation to the commission men, and placed them at the mercy, if not under the feet of the yard dealers. These latter attended the meeting in a body under the leadership of a general (who has since become famous among the lumbermen, not only of Chicago, but of the whole Northwest, and who to-day exerts a wide-spread influence at all the meetings of the Exchange, and would at once be chosen as the leader of another desperate sally upon the forces of the enemy, were the lumbermen to discover an enemy in sight, who was not stronger than themselves), Mr. Thaddeus Dean, under whose generalship the dealers declared themselves as constituting the membership of the Lumberman's Board of Trade, and while inviting the commission men to remain in membership, proceeded to parcel out all the offices among themselves, leaving those who had labored to keep the breath of life in the organization during a period of eight years out in the cold, without a crumb from the loaves and fishes of official life to comfort them. It was, however, in the final results, like many another sorely-mourned contest, a victory for those who were defeated, for during the succeeding winter of 1869 application was made to the Legislature, and articles of incorporation obtained for the "Lumberman's Exchange of Chicago," resulting in harmonizing the bitterness which had existed between the

two branches of the lumber business, hitherto antagonistic, although necessary, the one to the prosperity of the other. The organization thus formed is the one which still exists, and is now recognized as among the most valuable and influential of those which exercise an influence over the trade and commerce of the nation, holding a position of importance in the Northwest, second only to that which is maintained by the Chicago Board of Trade in its supervision over the grain, produce and provisions of the country.

The Lumberman's Exchange did not, however, at once assume the high position which it now occupies, but led a feeble existence until the spring of 1875, in which year, it, for the first time, employed a salaried Secretary, and, owing to the persistent energy of A. A. Carpenter, A. G. Van Schaick and others, was started in the right direction upon its present course of usefulness. Too much praise can not be awarded to these gentlemen, and all others who have displayed so great foresight and appreciation of the value of the statistical data, which the Exchange is now supplying to the advantage of all who are engaged in the lumber trade in any part of the continent. At the first election of officers in 1869, Mr. T. M. Avery was called to the Presidency, and Mr. W. L. Southworth was made Secretary, and this latter gentleman continued in that office for the succeeding five years, with no salary, and with no duties expected from him except such as could reasonably be expected from a gentleman who had an extensive lumber business of his own to engross his attention. It was the custom of the Secretary to keep a record of the occasional meetings which were held, supervise the dock, which was rented by the commission dealers independently of the Exchange, although subject to rules and regulations of its organization, and control, collect and pay the rents, taking a small percentage of the monies collected, as a compensation for his services, which included

a personal visitation of each yard in the city at the close of the year, for the purpose of making an estimate of the total stock on hand, more as a matter of curiosity than as a guide to determine values for the winter trade. Unfortunately, all the records which had been made prior to the fall of 1871, including all which had been handed down from the pioneer organization of 1857, were swept away in the great fire which destroyed so large a portion of Chicago in that year. Subsequent to the fire, the operations of the Exchange were so feeble that no systematic record was kept, until, in April, 1875, when, with W. W. Calkins as President, George E. Stockbridge was elected Secretary, and from that time the Exchange has accumulated in energy, influence and usefulness. Under Mr. Stockbridge as Secretary, the Exchange undertook, for one year, the oversight and control of the inspection and inspectors of lumber, and endeavored to procure and maintain business credit ratings of all who constituted the customers of the Chicago trade throughout the entire West. Both these endeavors were abandoned after about one year of trial, and from that time the Exchange has limited its endeavors to the licensing of inspectors of lumber under rules adopted for their guidance and government, and to the collection of statistics regarding the Chicago daily and yearly receipts and shipments of lumber and other products of the forests, and, informally, in concentrating the action of the yard dealers in the establishing of uniform price-lists. In pursuance of this policy, a monthly statement of statistical information has been published, originating with Mr. Stockbridge and continued by his successor, Mr. A. H. Hitchcock, who was elected Secretary in March, 1879, upon the resignation of Mr. Stockbridge. Mr. Hitchcock held the office during 1879-80, resigning the position in March, 1881, at which time Mr. G. W. Hotchkiss, the present Secretary, was elected by the

Board of Directors to the position. The official board, as now constituted (the official year terminating March 1, 1885), is composed as follows:

BOARD OF DIRECTORS.

B. L. Anderson,
J. O. Bryant,
A. Ballard,
P. G. Dodge,
V. A. Watkins,
T. Dean,
J. P. Ketcham,
S. K. Martin,
J. McLaren,
A. G. Van Schaick,
A. C. Soper,
J. S. Vredenberg,
W. E. Kelley.

OFFICERS.

J. P. Ketcham.....*President.*
George W. Hotchkiss.....*Secretary.*

COMMITTEE ON ARBITRATION.

T. Dean,
J. Durgin,
B. G. Gill,
J. B. Thompson,
M. B. Hull.

COMMITTEE ON APPEALS.

A. A. Bigelow,
A. A. Carpenter,
A. T. Lay,
J. H. Swan.

The growth and extent of the lumber business of Chicago may be traced from the following figures, which include all the information which has been preserved as a matter of record, and is at this time available.

YEARS.	LUMBER.	SHINGLES.	STOCK ON HAND JAN. 1.
1847	32,118,225	12,148,500	------
1848	60,009,250	20,050,000	------
1849	73,259,553	39,057,750	------
1850	100,364,779	55,423,750	------
1851	125,056,437	60,338,250	------
1852	147,816,232	77,080,500	------
1853	202,101,078	93,483,784	------
1854	228,336,783	82,061,250	------
1855	306,547,401	108,647,250	------
1856	456,673,169	135,876,000	------
1857	459,639,198	131,830,250	------
1858	278,943,000	127,565,000	------
1859	302,845,207	165,927,000	------
1860	262,494,626	127,894,000	------
1861	249,308,708	79,356,000	------
1862	305,674,045	131,255,000	------
1863	413,301,818	172,364,875	------
1864	501,592,406	190,169,750	------
1865	647,145,734	310,897,350	------
1866	730,057,168	400,125,250	------
1867	882,661,770	447,039,275	------
1868	1,028,494,789	514,434,100	------
1869	997,736,942	673,166,000	------
1870	1,018,998,685	652,091,000	282,560,526
1871	1,039,328,375	647,595,000	298,752,968
1872	1,183,659,280	610,824,420	234,438,527
1873	1,123,368,671	517,923,000	322,603,232
1874	1,060,688,700	619,278,630	328,519,752
1875	1,157,194,432	635,708,000	344,252,275
1876	1,039,785,265	566,978,000	352,587,730
1877	1,065,405,362	546,442,000	369,381,007
1878	1,179,984,710	692,544,750	385,569,024
1879	1,467,720,091	670,956,000	410,773,860
1880	1,564,538,118	650,922,500	451,282,059
1881	1,906,639,000	866,075,000	497,840,673
1882	2,116,341,000	954,549,000	560,416,842
1883	1,897,815,000	1,185,108,000	635,348,561
1884 (estimated)	1,800,000,000	900,000,000	600,000,000

In addition to the stock of lumber and shingles received at Chicago during the season of 1884 there should be named 66,000,000 lath; 2,800,000 cedar posts; 1,500,000 railroad ties; 30,000 cords of wood; 50,000 cords of slabs; 30,000 cords of tan-bark; 150,000 telegraph poles and 25,000 lineal feet of piles. The aggregate value o the receipts of forest products during the year, amounted to not far from $43,000,000. We have thus reviewed the trade which had its beginning but forty-seven years ago in the

venturesome experiment of Capt. Carver, and have traced it to its present aggregate of handling by the dealers no less than 2,350,000,000 feet in one year, while the original cargo representing a value not to exceed $200, has developed a business representing one of the largest industries of the West. The capital represented in the lumber trade of Chicago is estimated at $60,000,000, or a sum equal to two-thirds the aggregate deposits received by the banks of Chicago during the year. While the membership of the Lumberman's Exchange embraces but about 150 of the entire representatives of the trade in the city, or about two-thirds, that institution represents a cash capital fully equal to $45,000,000. In all the ramifications of the business, not less than 17,500 men find employment, one-eighth of these being sailors, engaged in the lake commerce which is employed in transporting the vast forest wealth from the mills of the manufacturing points to the yards of the dealers. In distributing the 1,900,000,000 feet of lumber, 800,000,000 shingles and vast array of other forest products which constitute the trade of Chicago, not less than 250,000 cars are requisite, which would form one continuous train 2,000 miles in length. The army of men and the vast extent of manufacturing industry, in the building of mills, of vessels, of railroad track and rolling stock, and the vast mercantile industries, finding their life and profit in traffic growing out of this vast industry, ramifying as they do through all departments of manufacture, merchandising and commerce, are incalculable both as to extent, and the money value which they represent. There is not a department of business wherein the lumber trade of the country does not exercise a potent if not a controlling influence, and in the value of forest products which are handled at Chicago, estimating them at not far from $43,000,000 for the year 1884, may be found one of the most important factors of

the growth, not alone of a city which in less than fifty years has attained a population of 600,000 souls, but as well of the vast region which in the same length of time has been peopled by many millions of industrious inhabitants, grouped in sovereign States, exercising a most important influence over the destiny and development of a mighty nation. The profitable character of the occupation and the respectability of those engaged in it are shown in the indisputable fact that a smaller proportion of failures occur among those engaged in it, than marks any other business or occupation, fully ninety-five per cent. realizing the success for which they seek.

Hayden Bros., office Pullman Building, Adams street and Michigan avenue; yard, 400 Lumber street. This firm have secured a lease of the dock property lately occupied by Soper Bros. & Co., lying between Lumber street and the river, about where Twentieth street extended would cross them. The dock frontage is 215 feet, and there are 600 feet of railway track in the yard. The yard office is 400 Lumber street. In this yard they will carry in stock the hardwoods usually to be found, but their specialty will be mahogany and other rare and fine woods and veneers. For their stock of mahogany Hayden Brothers have made arrangements with George D. Emery, of Chelsea, Mass., by which they become general Western agents for his product. Mr. Emery has the largest mahogany mills in the world, a possible capacity estimated at 10,000,000 feet per year, and his lumber is noted for its fine quality. Ordinarily mahogany is imported in flitches or squares, but by so doing much of the best part of the log is wasted, and Mr. Emery decided to ship in the round, which he is now doing. Messrs. Hayden Brothers have received already a large amount of mahogany, and much more is on the way. In connection with their yard the firm operate a public lumber dryer; it is a

battery of the improved Noyes kilns, with the Nichols bar, or open, platens. This is the pressure dryer, which has attracted so much attention, and seems to be particularly adapted to drying woods that have a tendency to warp and shrink. There are storage sheds in connection with the kilns, and the plant has a drying capacity of about 15,000 feet per day.

Holbrook & Co., Hardwood Lumber and Timber, established 1853, Grove and Eighteenth streets, South Branch of Chicago River.

R. B. Appleby, dealer in all kinds of Hardwood Lumber, also Hardwood Flooring, dressed and matched. Nos. 10 to 24 Morgan street.

B. F. Croft, Hardwood Lumber and Timber, Car, Bridge and Railroad Timber cut to order. Northeast corner Canal and 18th streets.

R. A. Wells & Bro., Hardwood Lumber, Walnut, Ash, Oak, Hickory, Beech, Maple, etc. Logs are purchased at various points, cut, dried and dressed, and shipped direct from mill at reduced prices. Southwest corner Clark and 22d streets.

The Sawyer Goodman Co., manufacturers and dealers in Lumber, Lath and Shingles. Philetus Sawyer, President; Edgar P. Sawyer, Vice-President; James B. Goodman, Secretary; William O. Goodman, Treasurer. Mills, Menekanne, Wis. 500 Lumber street.

The T. W. Harvey Lumber Co. T. W. Harvey, President; A. C. Badger, Vice-President; C. L. Cross, Secretary; H. H. Badger, Treasurer. 22d and Morgan street.

The H. Whitbeck Co., manufacturers and dealers in lumber. Daniel Wells, Jr., President, Milwaukee; J. H. Whitbeck, Secretary and Treasurer, Chicago. Mills a Marinette, Menominee River, Wis. Capacity, 40,000,000 feet; 900 feet dockage. 310 West 22d street.

Hamilton & Merryman Co., I. K. Hamilton, President; W. C. Hamilton, Vice-President; A. C. Merryman, Secretary. Mills, Marinette, Wis. Capacity, 30,000,000 feet. Loomis street near 22d.

Cutler, White & Boice, Lumber and Shingles. Cutting, bridge and elevator bills to order a specialty; carry large stock of thick uppers and selects. West end 18th street bridge.

C. A. Paltzer & Co. Pine Lumber Yards cover 240,000 feet. No. 2,598 Archer avenue, corner Quarry street.

PLANING MILLS.

Undoubtedly one of the most uniformly prosperous branches of industry in this city is the planing mill interest, in which millions of dollars are invested. In fact no better field for this branch of manufacture can be found in the United States, for here there is an abundance of raw material, and a never ceasing demand for planed lumber, both for building and for the various manufactures of doors, sash, blinds, packing boxes, etc., and the hard woods for furniture, floors, ceilings, and the multitude of purposes for which the finer woods are used. When we reflect that during the past year building improvements were made in this city to the value of $18,000,000, it is easy to understand why there has never been any extensive failure of parties running planing mills, and certainly none is likely in the

near future. In fact, in Chicago the field for operation in any class of industry is so broad and fertile that any undertaking will flourish if conducted upon sound business principles, but so particularly well adapted is the ground for development in the trade under consideration, that it is difficult to imagine a pursuit that assures more perfect success to the operator, be the capital invested much or little. The small concern thrives in the same proportion as the larger one, and the new-comer finds a cordial welcome and gracious encouragement; for generous rivalry and the right hand of fellowship to every competitor, are cardinal virtues with Chicago business men in all the avenues of industry, and therein lies much of the secret concerning her success and fame.

Figures, however are always more convincing than the strongest verbal statement, and a glance at the census returns in 1880 shows a capital of $2,077,213 invested in the business, and a product of $6,113,466. At present the estimated condition of the industry is as follows: Number of mills, fifty-six; capital engaged, $3,076,000; wages paid, $1,800,000; product, $13,150,000.

Goss & Phillips Manufacturing Co., successors to the old firm of Goss & Phillips, established in 1848, occupy a prominent position as manufacturers of not only Sash, Doors and Blinds, in the usual acceptation of the term, but supply every description of Interior Finish in Hard and Soft Wood in new and modern styles. They make a specialty of fine finish in every kind of Hardwood, and are glad to show at their factory, corner Fisk and West 22d street, specimens of workmanship and a great variety of original designs.

PORTABLE HOUSES.

This branch of business has recently obtained a successful standing in Chicago, caused by the growing demand for

all kinds of buildings that can be transported in a ready-made or "knock-down" shape (that is, having the framing all completed and ready for use) to localities remote from mills and lumber. Chicago's prominence as a lumber market, and her close proximity to the lumber growing region made it the natural point to which purchasers of these houses should look for supplies.

A. L. Lindsley & Co. have been building as a special feature in ready-made houses, a house composed of sections, varying in width and height with the size and style of building ordered. These sections are composed of timber for the studding, of the usual size, being grooved a limited distance from the edges of the studding, to allow two thicknesses of wall filling to be inserted and forced closely together; this filling being tongued and grooved, making an air-tight section with a dead air space between; this section completed, the size for an ordinary house, say of six to eight rooms, is thirty-six inches by ten, twelve and sixteen feet in length, is securely fastened in each piece; they are perfectly solid, and can be put in their places for walls and partitions by one or two men with ease, and when placed and secured to the plates above and sills below, are then further secured and made weather proof by a beaded strip $3\frac{3}{4}$ inches wide, nailed over the close joints, made by joining the sections; ceilings are put on in the same manner.

They can manufacture anything from a shed to a hotel, and are especially adapted for use in mild climates, being light and compact.

Their facilities for executing larger orders are complete, owing to the use of improved machinery, and they can with ease handle at one time an order for fifty houses. A market for these houses has been found in many parts of South America, particularly Brazil and Buenos Ayres, in the capital

of which, "LaPlata," 1,500 have been erected. Mexico also purchases large quantities.

THE JENNINGS DRYING MACHINE.

The work of drying moist articles inaugurated by this company, marks a new departure in the art of seasoning material.

In the past, processes have been patented and placed in successful operation based on the direct application of heat; these uniformly relying on their different modes to substantiate their claims of superiority.

The Jenning's Co., on the other hand, has followed nature's course, drying their material not by applying heat, but by applying dried air rapidly over the article to be deprived of moisture, thus gaining many advantages in the treatment of damp material not possessed by other processes. Among these may be named the following: Preserving the flavor of fruit to so marked an extent that the different varieties of the same species may be distinguished after treatment as readily as before; preserving the color, strength, and firmness of texture in lumber; drying leather without raising the grain or injuring the color; disinfecting offensive material, such as tankage or glue, while in the process of drying, so thoroughly that not a particle of odor is given off by the exhaust pan, as has been proved by tests made in this city under the auspices of a committee of the Citizens' Association. This process uniformly saves time in drying, in some articles completing the extracting of moisture in one-third, and in others accomplishing the result in one-tenth of the time required by other methods.

The Jennings Process Patents cover, with many others, the following points:

Common outside air is driven in pipes through intense heat, by which treatment it is deprived of a large proportion of its moisture.

The air thus dried is conveyed into a cooling apartment, in which its temperature is rapidly reduced to any desired degree, and the balance of the moisture extracted.

Thence the air, dry and cool, is conveyed to the drying-ing room, and, by mechanical means, thoroughly distributed to every part. After absorbing the moisture from the material in process of drying, it is removed and its place supplied with treated air. This process of removing the moist air, and supplying its place with treated air, is repeated every moment.

Thus in an inexpensive manner they dry and cool the atmosphere, and again in an inexpensive manner distribute it through the drying-room, and then exhaust it out.

By this treatment is secured a concentrated natural dry-air force, to apply to any material—working in damp weather as well as dry, night as well as day, excelling nature in the immense saving of time, and excelling the kiln drying processes in time, in cost, and above all in the condition in which it leaves the material.

Extracting, not expelling, the moisture, they avoid the semi-cooked condition that the kiln gives to material dried within its walls, and in avoiding this condition, as well as all excess of heat, they accomplish a natural seasoning of their material, as well as rapid drying.

There being no excessive heat in any part of the drying-room, the temperature of the material does not vary. Thus is avoided that twisting and warping incident to the material being in different conditions of dryness and heat, in different locations.

Not being a hot air process, they do not rapidly dry the outside exposure of the material, hence do not require to dampen the surface by injections of steam. The room being cool and dry and the moisture extracted from the material quickly exhausted out of the room, there is no precipitation of moisture anywhere within the drying apartment.

There are no steam pipes to require attention, no freezing and thawing to be provided against, no expenses attending the plant when, by reason of the season or other causes, it is not in use.

And, as will be seen, it can be used for Lumber, Leather, Grain, Cotton Seed, Wood Pulp, Bricks, and many other processes.

The patent is operated by The Jennings Drying Machine Co. W. H. Murray, President; J. W. Preston, Vice-President; G. H. Hulburt, Secretary, and J. F. Gillette, Treasurer.

FIREPROOFING AND TERRA COTTA.

Nowhere in the world is the fireproofing of important buildings so general as in our Western cities, but it is only lately that the thorough fireproofing of all parts of a structure has been accomplished.

The Pioneer Fire-proof Construction Co., formerly Ottawa Tile Co., are manufacturers and contractors of every description of tile for fire-proof buildings, and are also dealers in chimney flue linings, fire clay and fire sand, drain tile and sewer pipe, with an office and yard corner Clark and 16th streets.

The clay mines and the works of the Tile Co. are located at Ottawa and cover fourteen acres. The first stratum is loam, the second shale, the third about two feet of a good quality of coal, and at last a twelve foot vein of the best quality of fire-clay, with outcroppings of a fine white plastic potter's clay. The clay-bank stands on a picturesquely located hill, and though at present the clay is hauled by wagons, the company contemplate a tramway that will carry the clay by gravity most of the distance to the works.

The clay cellar has a capacity of about 1,000 tons, where the wagons unload the clay through hatchways. This clay is carried to the huge crushers. This apparatus consists of a large circular pan revolved by the huge shaft leading from the water-power, and two cast-iron wheels about 5 feet diameter by 10 inches of thickness and 4,500 pounds

weight, which are in turn revolved by the pan beneath, the rotary motion of the pan and the straight motion of the wheels set at right angles with the shaft giving them an enormous grinding as well as crushing power. The crushed clay finds an outlet in the side of the pan, where it is caught up by ordinary elevator buckets and carried to the top of a tower 70 feet high, where it is forced through a screen, and passing through a shute is conveyed again to the ground floor, where it is tempered in a similar machine to the crusher, the wheels being only about half as thick. There are two sets of crushers and two tempering machines, and their capacity is about 100 tons per day. The tempered clay is again elevated and distributed to several steam-presses which produce the tile. The press consists of a cylinder placed in a perpendicular position, and works a plunger which forces the clay through the dies and on the floor below, the tile is cut to the required length and wheeled away to the dry-rooms.

The dry-rooms are arranged in two three-story buildings, all built of 3½-inch hollow tile. In fact, the company use hollow tile wherever it is possible, in walls, chimney stacks, etc., as it has proved to be the best material to withstand the heat; the surface of a kiln chimney being comparatively cool with a coal fire on the inner side.

These buildings are arranged with three straight floors with half-story communications made by easy inclines so that material can be readily transferred from floor to floor. They cover 90,000 feet of space, and were almost entirely covered with the different descriptions of hollow tile which are constantly turned or handled on the floor till dry enough to burn. The tile is also moved from floor to floor by an ingeniously arranged belt elevator fitted with shelves. The dry-rooms are all fitted up with over 13,000 feet of steam pipes to assist in drying.

Perhaps the most important feature of this great "plan" is the burning kilns. These, thirteen in number, are arranged in two tiers, and are all of the latest improved pattern. They are circular in form, about 22 feet inside diameter at the base, about 12 feet high in the center, and built of firebrick. The doors are upon an improved plan patented by Mr. Johnson, the bands around the kilns being fastened to an iron door frame, which receives the expansion or contraction of the bands. About eleven kilns a week are burned, the action of the heat upon the clay being exceptionally perfect, few cracks being observable in the finished tile.

The motive power of these works consists of 125-horse-power, run by a 25-inch Victor Turbine wheel under a 28-foot head. Two boilers are used for heating and supplying steam for the die presses, and an engine of 60-horse-power is held in reserve for emergencies, for as these works run night and day the possibility of a stoppage from any cause must be provided for. This hydraulic plant is considered by experts to be the best that has ever been placed in the West. The water-wheel is set on a solid base of natural rock, supported upon iron rails. A four-foot pit is dug in the rock below the wheel connected with the tail race. The water from the hydraulic basin, which is 27 feet above the tail water, is conducted to the wheel through a 4-foot iron pipe 120 feet long, water being taken from 3 feet below the water level in the basin above. This obviates all difficulty from sticks, grass and other obstructions passing through the pipe, and interfering with the operation of the wheel, and effectually does away with the possibility of all leaks.

The history of these works is as rapid as it is extraordinary. Three years ago an old mill was converted into a small factory, and, with additions and improvements, has become what the visitor now sees, the largest and best

conducted fireproofing manufactory of the West. A great deal of work besides the construction of fireproof buildings, kilns, etc., has been done. Some parts of the works have been built upon raised ground, and underneath the walls the tail race from the water passes through an arched tunnel and out to the river beyond. This water tunnel had to be built directly below a row of kilns, and as the chimney-stacks are large and heavy the engineering skill exhibited is worthy of note.

The officers of the company are Mr. George M. Moulton, President; Mr. A. T. Griffin, Vice-President; Mr. E. V. Johnson, Secretary, Treasurer and General Manager; and it is due to the latter gentleman's enterprise and business sagacity that the building and progress of these works is due. The buildings were planned by him; he is the patentee of a number of the different patents of the company, not alone in the different descriptions of tile, but in much of the superior apparatus employed in the manipulation of the clay, notably the firekiln doors, which are an invaluable improvement upon those ordinarily used. As the business of the company extends to all parts of the country, Mr. Johnson has become widely known to architects everywhere, and few young men enjoy a more enviable reputation than he.

Among the many buildings fireproofed by this company we refer to the following:

The Chicago City Hall and Court House, Chicago, Ill.
Pullman Palace Car Co's Building, Chicago, Ill.
Royal Insurance Co's Building, Chicago, Ill.
Chas. Counselman's Building, Chicago, Ill.
New Board of Trade Building, Chicago, Ill.
Hiram Sibley's Mammoth Warehouses, Chicago, Ill.
Calumet Building, Chicago, Ill.
Potter Palmer's Hotel Building, Chicago, Ill.
Cook County Jail and Court House, Chicago, Ill.
Kendall Building, Chicago, Ill.
West Hotel, Minneapolis, Minn.
Colby Building, Milwaukee, Wis.

Stillman Apartment Building, Cleveland, Ohio.
Montgomery County Court House, Dayton, Ohio.
Gay Building, St. Louis, Mo.
Equitable Life Insurance Co's Building, St. Louis, Mo.
United States Court House and Post Office Buildings, Harrisburg, Pa.
And numerous other prominent buildings throughout the country.

TERRA COTTA.

The manufacture of Terra Cotta (baked earth), though comparatively of new growth in this country, is as old as history.

Its value as a building material lies in its absolute indestructibility. In cases of great conflagrations, such as those which destroyed Boston and our own city a few years ago, it is known that neither stone nor iron will resist destruction.

The former is resolved into powder and carried off to the four winds on the wings of the flame, and the latter curls up and collapses into chaotic ruin—while Terra Cotta, made properly of the right material, is indestructible by any known heat, and benefits by that which destroys all else.

Its value in an artistic sense lies in its plasticity while in a raw state, and the certainty with which it retains the form given it with outlines clear and sharp after it is burnt. It is also susceptible of varied colorings, the familiar dark red color, due to a large proportion of oxide of iron in the clay, which prevails in the larger proportion of Terra Cotta not necessarily accompanying all kinds of the product, it varying from a rich cream or buff color through all the various shades to a dark burnt umber. To sum up in a word its excellencies, it may be said that it is as desirable as stone or iron and much cheaper, being lighter, it may be shipped to any distance at a less cost for freight. It can be made as ornamental as desired at a minimum of expense. It has been endorsed by the leading architects of the country; used in many of the largest public and private buildings and given universal satisfaction.

Architects and builders are taking advantage of its artistic beauty and its serviceable qualities as well, and it is rapidly taking the place heretofore occupied by stone and iron for the facing and trimming of the imposing edifices now being erected.

The North Western Terra Cotta Works were established in Chicago in 1878, by the present proprietors, True, Brunkhorst & Co., and to-day they have made Chicago as a depot for the supply of this product second to no other city in this country.

Their works are located in close proximity to the city, so that the goods of their manufacture may be shipped by any line at a mere nominal cost. They cover a large extent of ground, and are fitted with every appliance for the successful production of superior work. They employ a large force of the most skilled workmen to be obtained, enabling them to manufacture every variety of architectural detail from special designs. They are also constantly adding new designs to their stock of patterns, sketches of which are from time to time prepared.

So perfect are their arrangements, that now any kind of Architectural Work can be furnished from special designs in from three to four weeks, the same formerly taking as many months.

In addition to Architectural Terra Cotta, they manufacture designs for interior decoration, tiles, horticultural and ornamental Terra Cotta in many varieties. They give constant employment to over 200 men, and their annual output exceeds a quarter of a million dollars.

In addition to the entire town trade (they being the only manufacturers of these goods in Chicago) their products are shipped throughout the entire Northwest, the Southwest, and the West to San Francisco.

The following are some of the prominent buildings in

course of construction or lately completed, for which they have furnished Terra Cotta:

Pullman Palace Car Company's Office Building, Chicago.
Charles Counselman's Office Building, Chicago.
C. B. & Q. Railroad Company's Depot, Chicago.
Open Board of Trade Building, Chicago.
Frank B. Smith's Business Block, Norfolk, Va.
Julius L. Brown's residence, Atlanta, Ga.
Abbott & Colby Block, Milwaukee, Wis.
National German-American Bank, St. Paul, Minn,
A. L. Mason's Store Building, Kansas City, Mo.

INTERIOR DECORATIONS AND FURNISHINGS.

Interior decorations have undergone such a complete revolution in the past decade that they now occupy the most prominent position in the construction of private residences. Gradually beautiful, harmonious and æsthetic ideas, as they should be understood, have taken the place of the cold and barren homes of former years. Notice the difference between the oil painted walls and bare ceilings, stone mantels and rough pine floors of years past and the handsomely hung and decorated apartments of the present, adorned with their cosey wood mantels and beautiful hard-wood wainscotings and floors, the latter covered with rugs and carpets of the finest texture. The same taste has invaded the homes of the mechanic and artisan as refined civilization gradually creeps into the heart, making of what was once but little better than a hovel an apartment of luxury. "A thing of beauty is a joy forever" said one of our contemporaries in a moment of exultation, but how could it better be illustrated than by our firesides, where are to be educated and trained the coming generation of a nation destined to rule the world of commerce, labor and art.

Fine arts, music and literature are becoming subjects of more careful attention in our houses, and it behooves us to protect these by placing their surroundings in perfect harmony, that the infant mind may develop in an atmosphere of delicate sentiment.

But how may this be done? you will say. The answer is simple. Devote the means and time usually sacrificed to worthless pastimes, in adorning and decorating your homes, be they palaces or cottages, making them pleasing and attractive. The term "Interior Decoration" is a comparatively new one, and implies all that may be applied to the embellishing of the interior of a building, including frescoing, paper hanging, wood working, brass working, furnishing, stained glass, etc., which we shall treat of separately.

Frescoing, an Italian and Spanish word of a Latin derivation "*figus*" meaning fresh (in French "*fresque*"), by which term is known the decorations of the Moorish and Italian palaces. Faribolt describes it as being a method of painting with universal or earthy pigments upon a "freshly" laid stucco ground of lime or gypsum. The pigments unite with the lime or gypsum ground and sink in, so that the colors become fixed and durable. It is a very common error to term the ancient paintings found on church walls, etc., "frescos," but there is scarcely an instance of genuine fresco among them. They are distemper paintings on plaster, and quite distinct in their style, durability and mode of manipulation, which chiefly consists in stenciling. Instead of these, are now more commonly used the most elaborate wall papers, leather hangings, Lincrusta-Walton, tapestries and papier mache.

This latter is especially a novel feature in decoration, and is becoming more popular every day, from the varied way in which it may be used and treated.

It is equally well adapted to household or theatrical decoration, and one of the finest examples of its merits may be found in the lavish remodeling of the Haverly Theatre. The main entrance and the art galleries are literally covered with this material and laid in solid bronze colors,

glittering under the sparkle of the incandescent lights. The material in itself is bold in relief, light and flexible in texture, and easily put up, thus uniting all the qualities required. Lincrusta-Walton is also an embossed material of English invention, much used in combination with wall papers, of such exquisite taste that it is difficult to imagine anything to surpass them in beauty.

The French, particularly, have elevated this trade to be ranked as an artistic profession. As a nation they were the first to decorate their apartments with artificial hangings; at a time when plastic and wall paper were unknown they covered their walls with unique tapestries, woven by the women of the castle, or mansion, when their chieftains were at war. A few fine specimens of these gobelins, hundreds of years old, may be seen in this country. Gen. Philip Sheridan owns a valuable collection, and Messrs. Healy & Millet, of Chicago, possess a few rare pieces of large dimensions.

Wood work embraces in itself many varied and distinct branches, and more wood is used in construction in America than in any other portion of the globe, and why not, since our forests yield such enormous quantities of rich and varied grain?

Wood mantels and staircases, being of a peculiar nature, require special talent in construction and are mainly on the order of cabinet work, while the balance of the interior wood finish may equally be finished in the cabinet shop or planing-mill.

Wood mantels may be made of a very high order of excellence, according to the fittings and tile employed to complete them. A few words may here be said in regard to their durability and safety, many persons still laboring under the delusion that they are liable to burn. Such ideas are erroneous as no danger can possibly arise from a carefully built mantel.

Floors are laid in hardwood, finished in oil, with elaborate borders, the centre covered by a rug or carpet.

Wainscotings, largely used in dining-rooms, halls and libraries, employ varied wood, oak being the finish for dining-rooms and the beaded being the most in demand, while a new form of mouse bead is coming rapidly into general favor. Inlaid panel ceilings, etc., are now largely in demand.

Furnishing includes the furniture proper and upholstering, and also the grouping of all the minor details, which requires much tact and attention, and which are, as it were, the finishing touches added to the room, as the last tints are added by the master hand to a painting before it is turned over to the critical eye of the *connoisseur*.

Furniture proper has had its many changes, passing alternately from "Renaissance" to "Boule" and Louis XVI. styles. The main feature in Renaissance was in the bold carving, while the "Boule" was in laying metal carvings and moldings in wood, and the style Louis XVI. was all heavily gilt. During the term of the second empire Mahogany and Veneering were much in use, and it is only of late years that the more massive pieces of furniture, executed from solid woods of fancy grains generally matching the finish of the rooms and forming part of these as fixtures, have superseded the heretofore more beautiful than useful gueridons and chairs.

The firm of Reckenberg & Clarke are large manufacturers of fine furniture and interior fittings for both public buildings and private residences. They manufacture hardwood doors, mantels and stairs as well, and we here append a list of a few of the more prominent residences and buildings which have been embellished by them: Palmer House, J. W. Doane, B. F. Moulton, A. G. Spaulding.

Carpets and curtain hangings have gradually assumed

warmer tones, blending agreeably together with the decorations and stained glass, which occupies now such a prominent position in our homes.

Glass itself was supposed to have been discovered by the Phœnicians. Pliny's history of that race relates that some Phœnician merchants, while on the beach, rested their cooking pots on blocks of natron, thereby producing glass by the action of heat on the alkali and sand.

This may have been the case, but it is proven beyond a doubt that the Egyptians manufactured glass long before the Christian era. Glass ornaments, now in the British Museum, had been found at Thebes by Signor Drovetti, dating back to 2380 B. C., and it is supposed that the Chinese used glass vessels previous to this. Be it as it may, glass was not introduced into windows, as a transparent substance, until much later, and the first "colored" glass windows we find any record of date as far back as the fifth century of our era, the earliest "existing" colored windows being in the Abbey of Tezernsee, in Bavaria. These are from the tenth century. From thence little is heard of glass painting until the thirteenth century, when this art flourished, until the sixteenth century. At that epoch we find a mention of opaque or opalescent glass in a crude form, when it suddenly declines and is lost to notice until the present century, when it was revived in Germany, England and France. It would thus seem, from past observation, that the use of glass has been at intervals of about 300 years, remaining in fashion for about the same period. From the commencement of this century up to within the past ten years, however, the style of stained glass has been much the same, but within the past decade important changes have taken place, substituting strong, heavy colors, by lighter and softer ones, and replacing painting by transparent mosaic work, or what is more generally known as

"Art Stained Glass." This has been accomplished to a great extent by introducing new glass of different forms and compositions, in the shape of tiles, castings, pressed, cut and broken jewels, and opalescent glass of every imaginable shade and color, made and so blended that any part of a picture can be accurately reproduced. One can see at once the immeasurable advantages derived from this, and some of the most beautiful effects have been accomplished by the combination of this style of work and incandescent light.

It must be stated here, with all due credit to American Stained Glass manufacturers, that this opalescent glass is a strictly American invention, and when the eminent artist, Paul Philippoteaux, who painted the "Battle of Gettysburg," returned to Europe, he ordered some very elaborate windows of Messrs. Healy & Millet for his studio in Paris. The same firm are continually engaged in catering to the development of public interest in this branch, and creating novelties in their unique designs and materials employed.

(It is a pleasure to stroll through their studio and salesrooms and there see displayed the manifold resources for embellishing interiors.) Be it as it may, there is still an immense field upon which to dispute the laurels, and it is a recognized fact that, as the art of making glass has gradually moved for generations and centuries westward from China to America, so it seems the progress is still extending westward, for Chicago is now valiantly disputing the right with the East of ranking first for genuine beauty and good taste in the art of Stained Glass.

McCully & Miles, whose establishment is located corner of Michigan avenue and Madison street, are also largely engaged in manufacturing ornamental Stained Glass.

Many prominent public buildings and residences in this city and throughout the Northwest have been ornamented by them.

DUMB WAITERS.

A most important adjunct to a well appointed house is a "dumb waiter." They not only overcome many times the decided objection that the gentler sex have to going up and down stairs, but are of great convenience for the carrying of food when served on floors other than that on which it is cooked, coal, soiled linen, etc.

We call special attention to those made by Mr. M. B. Sweezey, of No. 120, 20th street, which are provided with an automatic catch or ratchet, which prevents the falling of the waiter, or holds it in place during the loading and unloading process, and working as before stated, automatically, is not dependent on the thoughtfulness of the person using it to prevent the serious accidents that in those not protected in this way frequently occur.

So superior are they that they are recommended by many of our leading architects, and have been introduced into many of our most beautiful residences, among others those owned by C. B. Blair, I. G. Lombard, J. W. Doan, M. D. Wells and Amos Grannis.

IRON AND STEEL.

The iron and steel industry is the oldest of which there is any record in the world's history, and it may strictly be regarded as the parent of all other manufacturing interests, since none can be successfully conducted without the aid of these materials. Its influence on the general commercial and manufacturing interests of Chicago is of such importance that the following historical review of the subject will be found of more than ordinary interest.

There is no iron ore found in the vicinity of Chicago. Neither is there any coal to be had within a radius of many miles, which, either by cokeing or direct use, has so far been adaptable to the smelting of ore; yet the returns of the last census show that Chicago, which ten years previously occupied practically no position at all as an iron producing center, was in the year 1880 the fifth center in the whole country. For a hundred years Pennsylvania has kept the lead in the production of iron, but during the decade ending in 1880 it increased its production by only eighty-seven per cent., whereas the increase in the State of Illinois reached the wonderful proportion of more than fifteen hundred per cent., the material part of which was in the city of Chicago. While for the production of pig metal, etc., Chicago ranks as the fifth center, in the production of Bessemer steel, this city in the past ten years has, almost by a single stride, reached the position of the second center, not only as against any city

or county but also as against any State in the Union. The manufacture of iron in all the multifarious ways of which modern genius has conceived, has kept pace with the production of crude material, and the annual value of the output of Chicago now reaches the sum of $50,000,000.

It would, on a cursory glance at the primal natural condition of the States be supposed that Pennsylvania, holding, as it does, within its borders the finest coals for smelting and among the best ores in the country, would be able to hold indefinitely the proud position of the chief iron producing and manufacturing State. Particularly would this be the case when the enormous advantages it has in its long prestige and immense plant are considered. But on a closer examination of the facts, it will be seen that the originally highly favorable natural and artificial conditions not only may be, but actually are being overcome by an equally natural movement of population, geographical position, and by the construction of railways and other means of transportation. When more than a century ago, Pennsylvania became noted for its iron production, it had besides its natural position in respect to ores and coals, another and a no less important place—that of about the center of population, and for a long time its producers and manufacturers virtually enjoyed the monopoly of the trade, supplying very largely not only the States in the immediate vicinity, but also the near and remote sections of the South and West. With the movement of population westward and the discovery of inexhaustable veins of ore in Michigan, the position changed, and the question as to which section or location was to supply the demand of the future became simply one of transportation and geographical position.

Here, in brief, is the explanation of the wonderful increase in the iron trade of Chicago, and in the same can readily be seen the certain promise of still more rapid and

more wonderful growth of this trade in the future. By reference to the map, Chicago, it will be seen, is situated about midway between the ore beds of the northern peninsula of Michigan and the coals of Pennsylvania, while to the West and Northwest there is, easily accessible by water transportation and by many lines of railways, an immense virgin empire capable of maintaining a population greater than that of all Europe. To supply the wants of the millions of people who will settle, increase and thrive in this vast domain, is unquestionably the destiny of the producers and manufacturers of Chicago. The ores of Northern Michigan are all that can be desired by the producers of pig metal. Up to this time no better ores have been discovered anywhere, and it is highly probable that not only no better ores, but none even equally as good, are likely to be found in the United States or elsewhere. Then besides, the anthracite coals of Pennsylvania and the coals from which coke is made in that State and in West Virginia, have only just begun to be drawn upon, and ages must elapse ere the supply of ore, coke or coal fails. From Lake Superior, the ores come direct by water in large quantities and at low rates. The coal and coke come not only by many competing trunk lines, directly from Pennsylvania and West Virginia, but also by way of numerous lines of railway, crossing and tapping the trunk lines, and delivering the coal and coke to vessels at Lake Erie ports, whence they are shipped here. So great is the number of trunk and cross lines, and so conflicting are their interests, that it appears incredible there ever may come a time when a combination of all the coal and coke carrying railways may be formed which, by forcing freight rates up on these articles, may imperil the interests of the producers and manufacturers of iron of this place. Indeed the probability is that the demands and exactions of railway companies in the East will yearly be more closely

inquired into and restricted, while at the same time, the depth of the channels between Lake St. Clair and Erie, and between the latter lake and Lake Superior, are likely to be both widened and deepened, so that vessels of still greater tonnage than those now on the great inland waters, can come down from Lake Superior and up from Lake Erie. Thus, while it is not at all probable that railway rates thither can be raised and most probably will, from time to time be reduced, it is a certainty that on account of the improvements in the channels appertaining to the navigation of the lakes, that the carrying capacity of both steam and sailing vessels will be enlarged, and the rates correspondingly lowered.

Another, and a no less important point in favor of this locality as the iron center of the future, is its unparalleled wharfage front. Nowhere else in the world, perhaps, has nature been so prodigal in her arrangements of water courses, soils, and water sheds. Less than $2,000,000 has turned the waters of Lake Michigan from their natural outlet to an entirely different route by way of the Mississippi to the Gulf of Mexico. So, too, on account of the nature of the soil and topographical position, the arms of the Chicago River have been greatly extended, at a cost which, when the value of the wharfage front, thereby secured, is taken into consideration, may fairly be considered trifling. Practically, there is no near limit to the extension of the berth room for vessels of any tonnage or size. All that so far has been found necessary, and all that may be required in the future, to enlarge the wharfage front of Chicago to sixty or even one hundred miles, has been and will be, simply the application of the dredge to the beds of the existing water courses and their vicinity.

Up to 1836, the only representatives of the iron trade in Chicago were a few blacksmiths. In that year, however, the working in iron was begun, in what was for the time

and the size of the place, as well as its distance from ore beds, quite an extensive manner, by a firm known as King, Stowe & Co. These gentlemen constructed a foundry and machine shop on the South Branch, near what is now Polk street. The works covered nearly a block, and cost about $15,000. At first only a few hands were employed, and no specially important work was done until the following year, when Mr. William Avery came here from the East to fill a contract he had made for the construction of an engine. He brought with him quite a large lot of machinery, placed it in King, Stowe & Co.'s shops, which he took charge of, and turned out in the same year the first engine made in Chicago. It was of the marine type of that day, and was known as the Avery rotary engine. It was of about 350-horse-power, low pressure, and was built for and placed in the steamboat James Allen. The original contract for the construction of this engine called for about 600-horse-power, but owing to a severe depression in business in the West in 1837, the size of the vessel and the power of the machinery were reduced about one-half. Shortly after having completed the engine, Mr. Avery took a contract on the Illinois Canal, and served his connection with Messrs. King, Stowe & Co. Later, the works were rented by Andrews & Co. Mr. Andrews of this firm had been an engineer on the lakes, and he and his partner began the manufacture of piston engines. Andrews & Co. continued the business for some time, and then disposed of their interest to a Mr. Moses. This gentleman was succeeded by Mr. C. S. Engle. Among the difficulties which were encountered at the outset of the trade here was the scarcity of mechanics, and nearly all of those employed in the first year or two had to be brought from the East, and, as an inducement to come here, higher wages had to be paid than those ruling elsewhere. The pay of the better class of workmen was at the time, in

1837, about $3.00, but generally no more than $2.50 per day. Most of them were from England.

The second foundry and machine shop was started by Mr. Elihu Granger, in 1841, on Kinzie, near La Salle street. Mr. Granger invested in these works about $5,000, and at first employed not more than five or six men. At this foundry was cast the first gas pipe for the use of the city.

The year 1843 witnessed the completion of two more foundries and machine shops. One of these was owned by Messrs. H. H. Scoville and P. W. Gates, and the other by Mr. Wm. H. Stowe, who had been a member of the pioneer firm of King, Stowe & Co. Messrs. Scoville & Gates remained in the trade as a firm until 1849, when Mr. Scoville retired. To the establishment founded by these gentlemen, Messrs. Frazer & Chalmers finally succeeded, and it is now the widely-known Liberty Iron Works. In 1846 Messrs. James & Hannahs began the making of machinery and castings on Clinton, west of Jefferson street.

Two years later, a Mr. Cobb started a foundry and machine shop on Canal, near Kinzie street. Some time after, Mr. Henry Warrington bought Mr. Cobb's business, and carried it on at the same location for a time, and then removed to Clinton, near Carroll street.

About 1847, the firm of Scoville & Sons was organized for the purpose of manufacturing iron and machinery. The individual members of this firm were Mr. H. H. Scoville, the father, and Messrs. W. H., J. A. and I. Scoville. In 1855 they constructed the first locomotive. For those days it was considered quite a powerful one, having been of about eighteen tons weight, with drive wheels five and a half feet in diameter, and with a fifteen-inch cylinder and twenty-two inch stroke. It was called the Enterprise, and was for the Galena and Chicago Union Railroad. The same firm had been, for two or three years before the locomotive was com-

pleted, engaged in the making of cars and car wheels. During the last mentioned year the establishment was turned into a stock company, by which locomotive building was carried on until 1857 or 1858.

The progress made in the iron trade up to 1850 was exceedingly small, the necessities of the population in all the heavier kinds of work being supplied from the East. In the year named, however, there were in Chicago and its immediate vicinity twenty-five establishments that, strictly speaking, were foundries or machine shops in operation. But there were besides quite a number of blacksmith shops, and shops for the working up of sheet iron, etc.

The pig metal was obtained from the East at first and was mainly Scotch, but later, considerable quantities were received from Mishauwauka, Ind., and from one or two points on the eastern shore of Lake Michigan. It was not till as late as about 1860 that any pig metal made of Lake Superior ore was received. Inquiry as to the trade previous to 1855 reveals the fact that the early workers in iron here had to contend with the most serious difficulties in the conducting of their business. The sources of supply of pig, boiler and bar iron were in most cases far distant, and the means of transportation slow in the summer and in the winter very costly.

The making of the finer kinds of gas and other pipe on a large scale, though frequently attempted, was not completely successful until as late as 1867. The failures that had taken place in this line were occasioned by defective heating apparatus and machinery, but at present, and for more than ten years past, the manufactories here rank with the best in the country.

The construction of locomotives did not prove very remunerative, and the only company which had undertaken this branch of the trade dissolved previous to 1860, and since

locomotive building here has not been carried on excepting by a railway company. However the conditions that existed twenty years ago in this locality, and those of to-day are widely different, and it is certain that, should an enterprise of this nature be entered upon now or at any time in the future, success would be certain.

In 1850 the cost of the raw material used by iron workers here was under $900,000, the wages paid about $340,000, and the gross value less than $1,200,000.

During the succeeding ten years the increase in the number of establishments was not very important, but the number of hands employed was considerably greater, while the value of the output reached $2,125,000, or about ninety per cent. greater than in 1850. The wages paid in 1860 were more than double the amount for the year previously named, and were about $690,000. The value of the raw material in 1860 was under $1,150,000.

The ten years ending in 1870 showed a remarkable growth, and gave at the same time some indication of the still more remarkable growth to come. The number of establishments increased in this time nearly 300 per cent., and nearly all other figures show a still greater increase. The value of the raw material reached about $4,000,000, the wages nearly $2,750,000, and the total value of the output, or product, about $10,000,000, or an increase in the later item of nearly 500 per cent.

The census returns for 1880, show that in that year Chicago, as has been before stated, occupied the fifth place in the quantity of iron produced, and the second for the production of steel. Since 1880 there has been a still larger production of iron and steel, and a very important increase in the capacity for the production of these articles. A great many of the machine shops, foundries, rolling mills, wire works, etc., have also been greatly enlarged, and many new

ones have been started. Altogether there has been a greater increase in the capacity for producing and manufacturing within the past three years than took place during the entire ten years preceding 1870.

The present position of the trade is perhaps best shown by the following comparative statement:

	1860.	1870.	1884.
Number of establishments	53	150	400
Number of hands employed	1,285	5,322	18,500
Capital invested	$1,106,000	$6,293,000	$18,000,000
Raw material used	1,150,000	4,000,000	15,000,000
Wages paid	490,000	3,750,000	14,000,000
Gross value of product	2,125,000	10,000,000	50,000,000

In the production of Bessemer steel the manufacturers here are taking the lead over all others on account of using the most improved plant, and also on account of the nature of the metal obtained from Lake Superior ores which permits it to be conveyed direct to the converters, thus saving the expense of reheating. The increase in the capacity for the production of steel has been equal to more than 200,000 tons.

The enormous increase since 1870 in the number of men employed, the wages paid, the capital invested and the value of products handled is not so much owing to an increase in the number of establishments as to the kind of establishments. Thus, in 1870 there were no blast furnaces here in operation nor were there any producers of steel of any importance, while in 1880 the quantity of pig metal produced by these establishments, operating in the aggregate but ten furnaces, was 248,000 tons or nearly twice as much as was produced in the State of New Jersey, and more than two-thirds the quantity that was yielded by all the furnaces of New York.

As has already been said it is the manifest destiny of

Chicago to supply the wants of the great West and Northwest with all articles of steel and of iron, and that in following out its destiny it is to become the greatest iron market, as it is already the greatest grain, lumber and provision market the world has ever known.

TOYS AND FANCY GOODS.

Five years ago the trade in this line was monopolized by the great toy manufacturing centers of the East, and any attempt on the part of the Western dealers to contest for the supremacy with such long established and powerful firms was regarded as in the nature of things a hopeless and necessarily hazardous venture. Chicago enterprise, however, is not the kind to be daunted by a dismal outlook. "What others are doing we can do," has come to be regarded as a business axiom in this city, and so in the face of the fiercest opposition a house was found courageous enough to embark in this branch of trade.

In this spirit, daring, yet conservative, shrewd, far-seeing and sagacious, ever on the alert for opportunities, yet closely calculating every chance, is found the key to the phenomenal success of Chicago merchants. There is no headlong, blundering rashness in their business methods; they examine the ground carefully, weigh with accuracy all the possibilities of failure, and either dismiss the project as unprofitable, or enter upon it with an irresistible, unflagging energy which allows their competitors no rest.

So it was in the case under consideration. Our dealers saw that the Eastern manufacturers were reaping enormous profits yearly, and forming combinations in order to sustain their unconscionable prices. They were also aware that for obvious reasons, chief among which was the cheapness of labor and the superior skill of foreign artisans, the Swiss,

the French, and Oriental peoples, American manufactures could not compete with those of the old world. Nor would the tariff prove a serious obstacle, since articles of this kind were usually of little intrinsic value. Last, and by no means the least, among the advantages to be gained by importing their goods, was the superior worth and attractiveness of such articles in the eyes of the retail purchaser. Given two objects equal in value, elegance or usefulness; one of home manufacture, and the other brought over thousands of miles of sea, wrought into quaint shape by the deft fingers of mountaineer peasants, or strange, patient Asiatic peoples, and there is a charm of association about the one which rarely fails to make the other a drug upon the market. This, then, was the outlook five years ago; more desirable goods were excluded from the market by the greed of home manufacturers and the energy of Eastern jobbers. The experiment was worth trying, and a signal and demonstrated success followed, and now the entire West, both south and north, has been wrested from the old firms.

Importing directly, and in great quantities, from the old world, Jewelry, Stationery, Albums, Fancy Articles and Toys, the magnitude of the business will be appreciated when it is known that in 1883 sales to the amount of $3,000,000 were made on a capital of $600,000, being an increase of twenty-five per cent over the previous year. The outlook for 1884, and indeed the business thus far done, compared month for month with that of 1883, shows a still more notable increase, while a more expensive class of goods is every season demanded and supplied. Besides six houses thus engaged there are a number of millinery firms which have a toy and fancy goods department.

These, however, selling exclusively to smaller millinery houses, do not compete seriously with the legitimate jobbing trade.

In the figures given above the sales but not the capital of the millinery establishments are included.

The leading Toy and Fancy Goods firms are:

John D. Zernitz Co.

Schweitzer & Beer.

Vergho, Ruhling & Co.

Lehmann & Kinsman.

CROCKERY AND GLASSWARE.

Chicago has no manufactories in this line, trade being confined to jobbers, of whom there are six large firms importing in immense quantities, while looking to the East for domestic goods.

In the absence of manufacturers, however, Chicago is but on a par with the other leading cities of the country with whom she takes equal rank, and competes successfully in every market of the West and Northwest, if we except the inconsiderable trade with points beyond Utah, in which railway discrimination favors Boston.

It is scarcely necessary to state that, as this business deals in part with the luxuries of life, it is most sensitive to failure of crops or eras of financial stringency, inducing an attempt on the part of the people to economize and cut down expenses, As a consequence, when last year the general business of the country suffered a serious decline, the sales of Chicago dealers in this branch fell off as much as ten per cent, showing transactions aggregating $2,700,000, against $3,000,000 of the year before.

This depression was only temporary, in fact for some months business has shown a noteworthy advance, and the outlook brightens every day. Indeed it is now almost beyond question that this year will close with an exhibit of twenty per cent increase in sales over 1883, more than regaining all the ground lost.

When we consider that this class of goods must be shipped in packages of such great bulk and weight as to render the charges of transportation a most important item, the advantages accruing to Chicago dealers from their location on the only great water way between the East and West, can scarcely fail to be appreciated. This alone would allow them a margin of profit on prices which dealers in competing cities could not afford.

In addition we may mention the wonderful improvement in the glassware of American manufacture, as also in majolica and other wares, which in design and finish have been pronounced superior to the standard foreign products. Recognizing this, Chicago dealers unhesitatingly demanded from foreign manufacturers such a reduction in prices that they can now offer the retail trade imported articles as cheaply as home-made wares of equal intrinsic value, save perhaps a trifling advance to cover the cost of further transportation.

Burley & Tyrrell.
Walker & Stern.
French, Potter & Wilson.
Hall, Bersback & Co.
Pitkin & Brooks.

CARRIAGES.

MANUFACTURING AND JOBBING.

There are many reasons to believe that Chicago, already the largest market in the country for the sale of Carriages, is destined in the near future to become the greatest manufacturing centre; in the meantime the causes operating to bring about this result have placed the city far in the front as the most desirable point for the purchase of certain lines of goods. Chief among the advantages essential to cheap production is the proximity to raw material, and it will be seen that Chicago, with the ample forests of Michigan and Indiana just at hand, with special facilities for obtaining needed supplies of leather, possessing enormous advantages in the manufacture of springs and iron work, combining in her suburban factory sites minimum water rates, rents and taxes, with the cheap skilled labor which always seeks a great city, can manufacture and market goods with profit at prices which would drive competing cities out of the business.

It is, however, as a center for distribution that Chicago's geographical position, water and rail facilities, place her conspicuously in the lead. Indeed, to a shipping point of bulky products, it is difficult to overestimate the benefit of a hundred rival railways, which are reduced to a state of chronic competition, by the almost utter impossibility of pooling so as to reconcile so many conflicting interests, and the persistent rivalry of the various steamship lines.

The trade is at present divided among—

First—The wholesale manufacturers, who ship their products by the car load.

Second—Manufacturers of a superior class of goods for the home market, who, however, ship in any desired quantity to individuals as well as retail dealers.

Third—The firms which make a specialty of vehicles for use on the track, sulkys and light road and driving wagons.

Fourth—The firms, about eighty in number, who though continually turning out a limited amount of first-class goods, devote most of their time to repairing and filling special orders.

The total amount of capital thus engaged is placed by the most reliable estimates at $1,000,000. The total production is not far from $2,400,000, necessitating the employment of 3,000 workmen, and an annual expenditure of $1,350,000 in wages.

It is of course apparent on the most cursory comparison of the amount of goods thus manufactured with the products which here find market that the trade is still to a great extent controlled by Eastern firms with branch establishments here, and by manufacturers who consign to agents in this city the entire products destined for the West and North. In fact every establishment in the United States of any importance has its Chicago agency, while with some it is the virtual headquarters and sole distributing point.

We have spoken in a general way of the class of goods handled by our jobbers, yet a word still remains in reference to their bewildering and almost endless variety, as well as the surpassing elegance of finish and workmanship exhibited in the more expensive products. There is also a noticeable diversity in the style and design of carriages, most of the many varieties of which are ingenious in mechanism and possess some striking claim to public favor.

Indeed all of the leading firms have discovered the folly of marketing anything but creditable work. It is a mistaken policy, sure in the long run to prove disastrous. The rivalry between the dealers is of another kind, and is to see who can offer the choicest material and the most reliable workmanship at the smallest margin of profit. As a result of this honest emulation the difference between carriages of the first and second classes is little else than a difference in price and artistic finish, both are equally serviceable, and for that matter, equally valuable from a utilitarian point of view.

The outlook of business in this line was never better the wholesale trade is largely on the increase, and the smaller firms are fast quitting the field. To their retirement and the steadily increasing wealth of towns and rural districts is due the ever growing demand for a superior class of goods, which has been a notable feature of the trade during the past few years.

The prominent manufacturers and those represented here, are:

Abbott Buggy & Co.

C. P. Kimball & Co.

Cortland Wagon Co.; Edwin B. Palmer, Manager.

Studebaker Bros. Manufacturing Co.

James Cunningham, Son & Co.; J. W. Phillips, Manager.

VARNISH.

When the wondering attention of the first traveler was directed to a smooth, rounded, translucent, yellowish mass, now known as the Gum Copal of commerce, the quantities in which it was found may have led him to speculate on its possible utility, but it is entirely improbable that he ever entertained the remotest conjecture as to its value in the arts, or the immense traffic to which it was eventually destined to give rise. Indeed, when we come to consider how large a part varnish plays in the affairs of life there is still room for surprise even to the best informed. Where I sit writing, this, the desk on which I lean, the chair in which I sit, and indeed the most of the furniture which meets the eye, owes its lustrous beauty to a cloudy mass of gum which years ago exuded from giant trees in the heart of Madagascar. The luxurious carriages which roll so noiselessly along our streets bearing perhaps the representatives of millions, the magnificent pianos of modern manufacture, from whose mirrowed surfaces the face of the beholder is thrown back as from the depths of a lonely well, owe their exquisite perfection of gloss to the same pale, tasteless Copal gum. Nor have we as yet half exhausted our subject. Varnish certainly, like charity, covers a multitude of shortcomings; the crudeness of workmanship or the worthlessness of materials may be thus concealed from the most curious eyes; it has power to clothe the most dilapitated articles of furniture in a suit of glossy newness; it develops the fading

colors of time-darkened paintings; and what is that cosmopolitan finish acquired by travel, that well-bred familiarity with the conventionalities of modern society, or that specious, flattering courtesy which often cloaks a malevolent heart, what else is it but a varnish of a different kind?

This brittle, odorless, colorless, fosible, inflammable gum was first found, in all probability, in the forests of tropical Mexico; indeed, Copal is said to be the Mexican name for all gums or resins. Most of the Copal of commerce, however, is now brought from Madagascar, Africa, Brazil and India, in all of which countries the supply is as yet unexhausted. This is the basis of all varnishes, and, as such, is in ever increasing demand among civilized nations.

There in this city of Chicago no firms who deal in the gum, most of our varnish makers either importing direct or looking to New York for all supplies; we have, however, no less than seven concerns engaged in the manufacture of Varnish, whose aggregate capital amounts to $500,000, and whose output in 1883 was $750,000, while during the year just past the product had increased to $825,000. The number of hands engaged in these establishments is comparatively small, owing, of course, to the disproportion between the cost and bulk of varnish; the labor, however, is all high priced and skilled. The field supplied by our manufactures has of late years been largely extended, and now reaches east to Baltimore, south to Memphis, and embraces all the vast Northwest and West, a most remarkable gain, when we remember that all this territory was once controlled exclusively by Eastern seaport cities.

For this, which under the circumstances can be regarded as nothing else than a surprising commercial development, there is but one possible explanation, and that is that the varnishes of Chicago manufacture come as near as those of any other American houses to equaling the famous English

coach varnishes long considered the goal of effort in this direction, and that Chicago enterprise and happy geographical location has effected the rest.

THE DE GOLYER BROS.

Varnish manufacturing concern of this city, dates its establishment in Troy, N. Y., in the year 1840. Twenty-two years later, in 1862, they started a factory in this city, being the first house to appreciate the advantages of this location and growing possibilities of the Western trade.

They brought to their new location indomitable energy, skilled labor, and the ample capital required for so important and apparently hazardous undertaking. Their immediate success soon brought a rival into the field, a short-lived competitor as it proved, for it was soon incorporated with the older institution, and their joint product during the year following amounted to $100,000.

Other manufactories were also established, and the year before the fire $250,000 worth of varnish was placed upon the market. The great conflagration however, engulfed them all; but the old firm weathered the storm, and came to the front again with vastly enlarged facilities adequate to the demands of the era of unparalleled progress which was then to be inaugurated. Their plant is among the foremost in the country, and it is scarcely too much to say that their products are unsurpassed in the world.

This is particularly the case with their agricultural varnishes, which have proven of such uniform excellence, so reliable and durable, that the firm has not only held its own from the first, but has steadily gained ground, wresting new territory from its older competitors, until they now number among their customers the leading manufacturers of wagons and agricultural implements in the United States.

Their coach, carriage and railway varnishes are in use

by the leading manufacturers of railway carriages, and vehicles generally throughout the country in a service requiring a varnish of particular durability, as well as one that works easily, and are of many grades, for which they put forward a claim for superiority not as yet successfully disputed.

The last, and not the least important branch of this industry, is their manufacture of furniture varnishes, likewise of various grades of excellence suited to the different surfaces for which they are designed, piano-fortes, bedroom sets, billiard tables, cabinet chairs and iron work. Of these their Imperial Hard Finish has come now into such general use as to abundantly demonstrate its unequaled excellence, being WARRANTED free from the most frequent and indeed almost universal objection to other makes: that is, to lump and settle upon exposure to the atmosphere.

ICE MACHINES.

The supply of ice to our large cities is of as much importance as water, and the total number of tons annually consumed aggregates such an enormous amount, and is handled by so many persons and in such varied ways, as to a great extent to baffle any statistician who should endeavor to propose an accurate amount of the quantity annually stored and distributed for its numerous purposes.

As ice is one of nature's own products, which may be had for the getting, it will be seen that the cost to the consumer depends upon the amount expended in storing and transporting it, in which operation, owing to its perishable quality, a large proportion of loss accrues, which necessarily enhances the value of the remainder.

To manufacture ice as wanted, and in the neighborhood requiring its consumption, therefore, does away with the two features of expense, bringing to our consideration a new one—the cost of its artificial production.

The Linde Ice Machine, the invention of Professor C. P. G. Linde, has been in active operation in this country—in Europe, and in India, during the past eight years, and has proved seemingly successful, not only taking the place of the primitive machine heretofore used, but also entirely superseding the natural product.

The refrigerative effect in the Linde machine is produced by the compression and expansion of anhydrous ammonia within heavy iron coils, made of continuous pipe, and tested

under 500 pounds pressure, excluding the possibility of a leakage. These coils are placed in iron tanks and submerged in water, and here the liqueforation and evaporation of the ammonia takes place, the latter never coming in direct contact with the substance to be cooled. The refrigerating tank in which the liquid ammonia coming from the condensing tank is evaporated, is filled with water, brine, or such other cooling agent as may be employed, and this liquid, after having been cooled to as low a temperature as may be desired through the evaporation of ammonia, is then by means of a pump conducted to the room or substances where the cold is to be distributed.

The ammonic vapors after having performed their cooling duty, are drawn through a pump, and by the same compressed back into the condensing tank where they become liquefied through the influence of the pressure, and surrounding cooling water and returned to the refrigerator, where the liquid released from the pressure is again ready to be subjected to the process of evaporation. The advantages of this machine are numerous, it requiring but a small outlay of power to run it. It is easily operated, being simple in construction, and the consumption or loss of ammonia insignificant, while it can be profitably employed in the production of ice for all purposes, as well as for maintaining a steady low temperature of air fluids and solids. They are now employed in breweries, dairies, butter factories, chemical works, distilleries, skating rinks, meat markets, ocean vessels, wine cellars, sugar factories, and other industries requiring ice in large quantities or a low temperature of air, and clearly demonstrates the fact that this end can be attained by a smaller outlay and less continuous expense than that at which natural ice can be furnished under the most favorable circumstances. They are built in sizes to produce from one to one hundred tons of ice per day.

The ever increasing demand for ice machines and the great popularity of that invented by Professor Linde, has induced us to give a full and lengthy description of this machine, which is fully merited by the value of the invention.

Mr. Fred W. Wolf, 62 to 66 West Lake street, Chicago, is the manufacturer and sole owner of these patents for the United States.

MILL FURNISHINGS.

For a number of years Chicago has taken a leading part in the mill furnishing trade, and the miller can get his entire mill fitted up from Chicago without going elsewhere. This extends even to the silk bolting cloth which he uses for covering his reels. Up to a short time ago the prominent manufacturers of this class of goods, which are made in the mountains of Switzerland exclusively, have had agencies in New York, and the trade has been supplied from there; but the western country has of late been opening up so fast, that one Swiss firm in this line has considered it prudent to transfer their New York branch to the western metropolis; this being more central for their trade all over the States.

Few people outside those interested in milling, have any idea what bolting cloth really is. This article is used for sifting flour from the coarsest to the finest, and it is therefore essential that all the meshes in the sieve have to be the same size. In the finest numbers there are upwards of 32,400 meshes to the square inch, and when one considers that the cloth is woven by hand, it is marvelous how such a result can be obtained with anything like accuracy.

The firm of Reiff Huber, of Zurich, Switzerland, is the one above referred to. They have extensive stock-rooms at 64 South Clinton street, and they express their willingness to show their goods to any visitor to Chicago, who may take an interest in this special class of goods.

STOVES.

Those who are conversant with the stove trade assert that the United States makes and uses more stoves than any other country in the world. Statistics kept by the trade also show that Chicago disposes of more stoves than any other city in the country. Hence, it may justly claim that it is the largest stove market in the world, yet while it leads in the sale of such goods, it has as yet not made rapid progress in their product as compared with the volume handled. Only a moderate percentage of those sold in Chicago are made here. But it is gratifying to know the stove foundries are annually enlarging their capacity and volume of goods turned out, and this branch of manufacturing promises ere long to become a leading feature of the city's industrial interests. The facilities possessed for concentrating the iron and fuel, which are the leading factors in stove foundries, at the most reasonable cost, gives its stove makers superior opportunities in the way of making cheap goods. Being the leading jobbing market in the United States, the goods can be shipped direct from the foundry to the dealers in every part of the country, thereby saving the freight which competing establishments are compelled to pay when sending their goods here for sale. Inquiry among the leading manufacturers here regarding the materials used in stove-making, develops the fact that the use of Scotch pig iron, which a few years since was regarded as absolutely requisite in the production of

a strong, smooth casting, and which, from its high price, naturally enhanced the cost of the goods, has been entirely superseded by mixing different grades of American pig, which are found to make a plate of greater strength and smoothness than foundrymen were able to turn out when the foreign pig was used. Many also assert that the American castings, those made from American iron, expand more gradually under the influence of heat, and, as a consequence, are less likely to warp or crack while hot. Although the trade, like nearly all other leading lines of business, has had many adverse conditions with which to contend, there has been a considerable increase in the quality of goods turned out by the various stove works located here. There has also been many improvements in patterns calculated to increase their popularity with those who see them. The square heating stoves introduced last year have undergone numerous alterations that have largely added to their beauty and serviceableness. Some entirely new and novel styles have been introduced that are far more handsome than any heretofore brought out. And it is safe to assume that Chicago dealers will not fall behind in the introduction of any features that are attractive and valuable.

The prominent stove manufacturers and dealers in Chicago are:

Chicago Stove Works.
Collins & Burgie.
Cribben, Sexton & Co.
Michigan Stove Co.
Rathbone, Sard & Co.
Richardson & Boynton Co.

THE TELEPHONE.

The discovery of the possibility of conveying articulate sounds by electricity, and its subsequent elaboration into the inventions which are now included under the general head of telephony, is undeniably one of the most remarkable achievements of any age. Though it is now but a few years since the first faint whisper over a wire was noised around the world and opened an exhaustless field for scientific investigation, more practical advance has been made in the methods and mechanism employed in transmitting the voice over long circuits than in any other branch of electrical discovery.

The partial success of the earliest instruments, turned to this channel the efforts of hundreds of workers, including some of the most skilled inventors and noted electricians of the world; and in consequence every month brought some new discovery, and every year beheld the introduction of a more simple and perfect instrument.

Finally 1883 witnessed the organization of the Overland Telephone Company, incorporated to operate the telephone transmitters and receivers patented by Dr. Myron C. Baxter. The formation of this company, however, was preceded by a series of the most careful and exhaustive tests, which demonstrated the unquestionable superiority of the Baxter system, and surprised the electricians of the country by the ease with which the human voice could be carried over a circuit of eight hundred miles in length.

These experiments were so convincing that, in accordance with the report of the disinterested experts who made them, the company advance the following irrefutable claims in regard to the excellence of their telephone:

First—It is the simplest in construction, requiring less repairing.

Second—It accommodates itself to the volumes of sound transmitting with equal audibility a whisper or the loudest tones.

Third—By this device a continuous current of electricity is converted into a make and brake current by the voice on the diaphragm.

Fourth—Induction is overcome by using a larger number of cells than has heretofore been considered possible.

Fifth—It is the only system in which the addition of each cell increases the distance over which the voice can be transmitted.

Sixth—It is the only Telephone with which an underground wire can be successfully used, the ticking of a watch having been conveyed over ninety miles of the Brooks Underground Cable in Philadelphia, joined to a mile of aerial wire without a metallic circuit.

This company, having in successful operation a large number of Overland Exchanges in many of the leading Eastern cities, Philadelphia, Pa.; Utica, Auburn, Syracuse and Rochester, Y. Y.; Cincinnati, O.; Lexington and Louisville, Ky.; Detroit, Omaha, etc., the Northwestern Overland Telephone and Telegraph Company of this city, acquired by purchase the exclusive right to use all of their present and prospective inventions in the States of Illinois, Iowa, Minnesota, Wisconsin and the Territory of Dakota, the parent company, from whom these rights are derived, contracting to assume all suits and protect all patrons against any,

litigation which may arise. The Northwestern Company is, therefore, prepared to grant licenses for counties, cities, towns and villages, or negotiate any unsold portion of the territory under their control. In addition to their Telephone is their District Service and Fire and Burglar Alarm, a system of public service which practical experts have pronounced superior to any other now in use. The company has now in partial operation, and in course of construction, a Telephone Exchange in this city, in which forty different classes of business are already largely represented. Indeed, test lines have been laid, and instruments are now in operation at the Board of Trade, Lumberman's Exchange, Commercial Exchange, Drug, Paint and Oil Exchange, Hardware Exchange, Real Estate Exchange, Builders' Exchange, Stock Exchange, and the Chicago Board of Underwriters, to all of which they invite the inspection of interested parties. That the company is financially strong and under the management of able men will be seen by its corps of officers, which includes, Walter L. Peck, President; Byron P. Moulton, Vice-President; John M. Gartside Secretary, and Charles M. Henderson, Treasurer.

Their city office is in the Borden Block, under the management of Mr. William S. Morse.

RAILROAD TRANSPORTATION.

Other cities have unexceptional railroad connections with points upon every hand far and near, but no city is so completely environed by iron rails as Chicago. Her geographical center in the Union, and that center being located in the very midst of the most fertile land on the North American continent, has created her pre-eminence in this respect. In consequence of this peculiarly favorable position and the extraordinary business capacity and energy of her merchants, manufacturers and citizens generally, attracted the attention of railroad capitalists, who, with that prompt activity for which American railroad men are justly celebrated, at once took advantage of the golden opportunity and enriched themselves, by developing the Garden City as the chief railroad center of the country; and in thus giving her facilities for transportation incomparably superior to those enjoyed by any sister city in the Union.

During the last few years the increase of railroad facilities in Chicago has been most remarkable, and it would, doubtless, have been much larger by this time had it not been for a check that has been imposed upon all such enterprises throughout the country by mistaken efforts of, doubtless, well meaning men, who have sought, and are yet seeking, to impose legislative restraints on the natural and wholesome growth which such enterprises are bound to maintain, if left to themselves and the trained judgment of their managers. The latter ought to be credited with sufficient

sense to understand their own interests, even if they be suspected of an unpatriotic desire to waste their own and their constituents' property in the attempt to oppress and wrong their best customers. And the worst feature of the whole matter is that almost every year seems to bring about some new and equally unreasonable hostility. One ostensible object of this class of legislation was to compel the railroads to adopt a uniform system of maximum passenger and freight fares, but it is very doubtful whether there are a dozen railroad companies now in the country that do not constantly, and in obedience to the immutable but unwritten laws of trade, ship both freight and passengers at lower than the rates demanded by State legislation, and which will not continue, as their economical conditions improve and their business increases, to make still further reductions. It is their interest to do this, for in doing it they increase their revenues and the interest-paying potency of their capital stocks.

Another great point which the legislation spoken of was said to have been intended to bring about was the improvement of the road-beds; increased safety in the building of culverts and bridges; the use of better and stauncher rails, timber and trusses, and all sorts of material improvements of the kind. It does not seem to have occurred to the people and legislators of the period that all these matters bore the most intimate relation to financial capacity, and that no amount of legislation could compel a railroad company to reconstruct its road if it had not the cash at command to do it with; nor that any company that had the cash and failed to use it in putting its property into the very best possible condition, would exhibit that species of lunacy which is charged against the miser whose horse died while he was engaged in the vain effort to accomplish the task of making it live without food.

So, too, with the latest development of railroad management—consolidation and its accompanying economies. When the new policy made itself manifest in evident strength and extent, an outcry was raised that the monopolists were grasping at the liberties of the people, and seeking to oppress and ruin them in order to increase their riches. And this outcry is still kept up in some quarters, in spite of the evident facts that the oppression and ruin of a people is the surest way to the destruction of the sources of revenue, and that to-day consolidation and concentration of management have enabled the railroads to reduce freights, to open up new and vast fields for settlement, to create States and push forward the material prosperity of countries that but a few years ago were practically inaccessible to commerce.

To illustrate the vast extent of the railroad facilities of Chicago we extract the following from the annual report of the railways in Illinois, made by the Board of Railroad and Warehouse Commissioners on December 10th, 1884:

"The total length of these roads is given at 20,477 miles, of which 5,676 miles are in Illinois. The aggregate of main lines and branches is 31,059 miles, of which 9,141 miles are in this State. There were 117 miles of new road built in Illinois, during the past year. The total amount of stock of these companies is given at $681,127,539, of which $519,136,245 is preferred. The amount held in Illinois is $11,684,450. The aggregate stock and bonded floating debt is $1,346,751,603. Cost of construction and equipment $1,255,513,448.

"The total amounts of taxes paid in Illinois during the past three years are as follows: In 1882, $1,639,770.98; in 1883, $1,690,067.17, and in 1884, $2,067,982.20; total, $5,297,820.35."

Of the total number of miles of railroad in the United States to-day, there are roads representing fully one-third

centering in Chicago, and making it the greatest railroad center in the world.

We add a brief description and some of the prominent features of these leading lines.

CHICAGO, ROCK ISLAND & PACIFIC.

One of the most enterprising, as well as most successful and popular railroad companies in the country, is the Chicago, Rock Island & Pacific. This was the first line to connect Chicago with the Mississippi River. Chartered originally in 1847 as the Rock Island & LaSalle Railroad, in 1851, by an act of the Legislature, the name was changed to the Rock Island Co., and it was under that name that the road was constructed between Chicago and Rock Island. Since that time it has by amendment to its charter, and by consolidation with other companies secured valuable and extensive lines.

The road to Rock Island was completed in 1854, and at once took rank as one of the leading lines of the country. It passes through the finest region of the great State of Illinois, and has been an important factor in the business prosperity of the city of Chicago. In 1866 the road was consolidated with the Mississippi & Missouri Railway Co., under the name of The Chicago, Rock Island & Pacific Railway Co., and in June, 1869, its line was completed to Council Bluffs, giving it connection with the then newly completed Union Pacific Railway. From the date of its completion to the Missouri River it has taken rank as the shortest and best link in the mighty chain of railroads that connect the Orient with the Occident, and has been the favorite route with passengers to and from the mining territories, and the States that are washed by the waters of the Pacific Ocean. By consolidation with other lines, and the

building of branches in Iowa and Missouri, the "Rock Island Line," as it is familiarly known, has expanded since 1869 from 550 miles of road to a gigantic railway of nearly 1,400 miles. Its termini now embraces the flourishing cities of Chicago and Peoria, Ill.; Keokuk, Council Bluffs, and Des Moines, Iowa; Atchison and Leavenworth, Kan.; and Kansas City, Mo. Its geographical position, it will be seen by reference to a map of the country, is in the very heart of the great grain and cattle producing portions of what has now become the Central Western States; and the commerce that flows over its lines, is from not only these States, but from every one of the Western Territories—from California and Oregon, and even from the oldest empires of the world, Japan and China.

Running through a very fertile region, inhabited by the most energetic and intelligent of people, it has, thanks to a progressive management, been prosperous from its very inception; and by a line of policy closely followed, which has for one of its best features fair rates for passengers and freight, it has had, and maintained, the friendly sympathy of the people who are its patrons.

Of the various causes that have tended to the advancement of the commercial interests of Chicago, and to the development of the great West, probably none figure more prominently than the railroad in question. There is no line of railroad in the West, at least, if in the entire country, which in proportion to its mileage, earns a greater revenue, and no road that accommodates a larger population or greater interests along the same length of line.

A few years ago the management, not content with the business coming over the road extending to the West, opened up what is known as the Albert Lea Route. This route, which is quite a favorite with tourists, and which does an extensive freight business, extends through the

great Red River Valley, and the vast Northern Pacific country to Minnesota and Dakota. It reaches to Minneapolis and St. Paul, and while rendering accessible the beautiful scenery of Minnesota and the Upper Mississippi, it fixes a firm grasp upon the immense business of the great Northwestern country.

The equipment of the road is first-class in every particular; it is composed of the very best day cars that are made, Pullman Palace Sleeping cars Horton Reclining Chair cars, and a line of the finest dining cars that are to be found on any railway in the world.

The management is ever ready to meet the requirements of its patrons, and is always the first to adopt the latest modern improvements tending to safety, speed and comfort. For the accomodation of its suburban traffic unusual facilities are afforded, and these have been of a nature to greatly enhance the value of suburban property as far south as Blue Island, and at intermediate points on the suburban division of the Rock Island.

The financial affairs of the company are in a most satisfactory condition, as is shown in the fact that the business in all departments is larger per mile than upon any other Western road. This has been accomplished by a wise and liberal policy, the superior class of the accomodation provided, and a clearly demonstrated desire to give the lowest rates commensurate with the service rendered in whatever department it may be.

The following shows the number of miles in operation:

Chicago	Ill.	to	Davenport	Ia.	183	Miles.
South Englewood	Ill.	"	Irondale	Ill.	7	"
Bureau	Ill.	"	Peoria	Ill.	47	"
Davenport	Ia.	"	Missouri River	Ia.	317	"
Davenport	Ia.	"	Kansas City	Mo.	338	"
Newton	Ia.	"	Monroe	Ia.	17	"
Des Moines	Ia.	"	Indianola	Ia.	23	"

Somerset Junc	Ia.	to	Winterset	Ia	26	Miles.
Menlo	Ia.	"	Guthrie Center	Ia	14	"
Atlantic	Ia.	"	Griswold	Ia	14	"
Audubon Junc	Ia.	"	Audubon	Ia	25	"
Avoca	Ia.	"	Carson	Ia	17	"
Harlan Junc	Ia.	"	Harlan	Ia	12	"
Des Moines	Ia.	"	Keokuk	Ia	162	"
Mount Zion	Ia.	"	Keosauqua	Ia	4	"
Wilton	Ia.	"	Muscatine	Ia	12	"
Washington	Ia.	"	Knoxville	Ia	78	"
Cameron	Mo.	"	Atchison	Kan	63	"
Edgerton Junc	Mo.	"	Leavenworth	Kan	22	"
			Total mileage		1,381	

The general officials of this line are as follows:

R. R. Cable	President and General Manager	Chicago, Ill.
David Dows	Vice-President	N. Y. City.
A. Kimball	Vice-President and Gen'l Superintendent	Chicago, Ill.
F. H. Tows	Secretary and Treasurer	N. Y. City.
T. F. Withrow	General Solicitor	Chicago, Ill.
H. F. Royce	Ass't Gen'l Sup't	Davenport, Ia.
W. G. Purdy	Local Treasurer	Chicago, Ill.
C. F. Jilson	Auditor and Ass't Secretary	Chicago, Ill.
E. St. John	General Ticket and Passenger Agent	Chicago, Ill.
E. A. Holbrook	Ass't General Passenger Agent	Chicago, Ill.
A. Temple	Ticket Auditor	Chicago, Ill.
W. M. Sage	General Freight Agent	Chicago, Ill.
J. M. Johnson	First Ass't General Freight Agent	Chicago, Ill.
Dan. Atwood	Second Ass't General Freight Agent	Chicago, Ill.
G. H. Crosby	Freight Auditor	Chicago, Ill.

CHICAGO, BURLINGTON & QUINCY.

This great "system" which now owns and controls over 5,000 miles of first-class track, was originally chartered as the Chicago & Aurora Railroad in 1852. The present corporation, the Chicago, Burlington & Quincy, was formed by consolidation in 1856. That part of the State of Illinois known as the military tract, has been the exclusive territory of the Burlington people, and those circumstances which exist only when brisk competition is lacking, have made it

one of the wealthiest and most powerful corporations in the world, with a capital stock that runs far up in the tens of millions, and is managed by able, progressive, liberal men, who stand in the front rank of their profession. The business of the company is diffused through all that extensive territory of which Chicago, St. Louis, Kansas City, Omaha and Denver are chief cities, and of which the wealthiest and most populous portions of the six States already named, are legitimate and constant feeders.

An evidence that the Burlington Route is the popular railroad west of Chicago, and that in addition its immense system traverses the most thickly settled and productive country in the United States, is shown by the following correct statistics.

The following exhibits the total receipts of Grain, Cattle, Hogs, Sheep, Horses and Wool, at Chicago, for the year 1883, carried by lake, canal, and seventeen railroads:

Articles.	Received By all Routes.	Total by Burlington Route.	Per ct. by Burlington Route.
Wheat, bushels	20,364,115	6,824,158	33.51
Corn, "	74,412,319	30,747,672	42.66
Oats, "	36,502,283	7,821,807	21.42
Rye, "	5,484,259	1,854,121	35.61
Barley, "	8,831,899	1,928,778	21.84
Total bushels Grain	149,594,995	49,175,936	32.87
Wool, pounds	40,433,104	11,794,057	29.15
Hogs, number	5,640,625	1,375,723	24.30
Cattle "	1,873,809	555,295	29.50
Horses, "	15,255	4,368	28.60
Sheep, "	749,917	201,551	29.80

When it is considered that the six great States through which this road runs, and which are its immediate feeders, produce about one-third of the wheat raised in the United States, nearly one-half of the corn, over one-third of the oats and cattle, nearly thirty-five per cent. of the hogs, and

other products in about equally great proportions, the possibilities for this road bewilder the mind by their immensity and dazzles the imagination to fix an idea of its potential and enriching future.

It is the only line extending from Chicago, Peoria and St. Louis, direct to Denver, passing through Pacific Junction, Omaha, Atchison, St. Joseph and Kansas City. It traverses all the six great States of Illinois, Iowa, Missouri, Kansas, Nebraska and Colorado, with branch lines to their larger cities and towns.

It adopts every improvement and facility that tend to the rapid, safe and satisfactory transmission of both passengers and freight.

The general officers of this company are:

C. E. Perkins, President, Burlington, Ia.
T. G. Potter, 1st Vice-President, Chicago.
J. C. Peaseley, 2d Vice-President, Chicago.
T. G. Porter, General Manager, Chicago.
Henry B. Stone, Assistant General Manager, Chicago.
E. P. Ripley, General Freight Agent, Chicago.
Paul Morton, Assistant General Freight Agent, Chicago.
Perceval Lowell, General Passenger Agent, Chicago.
E. L. Lomax, Assistant General Passenger Agt., Chicago.

THE CHICAGO & ALTON RAILROAD.

The Chicago & Alton Railroad extends from Chicago to St, Louis in nearly a direct line about 282 miles in length, with a branch running from Bloomington. about midway between the two great cities, in a southwesterly direction, to Roodhouse, and thence due west in a straight line, across the Louisiana bridge of the Mississippi, to Kansas City, distant from Chicago about 526 miles. Besides these, there are various minor branches; one connecting Roodhouse with Alton, bringing the traffic from Kansas City and Central

and Northern Missouri to Chicago; one running from Mexico, Mo., to Cedar City, on the north bank of the Missouri River, opposite Jefferson City, the state capital; one from Joliett, Ill., to Coal City, and one from Dwight, Ill., to Lacon and Washington, at which latter place it makes close connection with lines running to Peoria, Pekin, Rock Island and the whole North.

The management of the Chicago & Alton Railroad is one of the most successful and energetic in the country. Its policy has always been one of consistent effort to afford the public, both passengers and shippers, the utmost convenience and dispatch that science is capable of producing. For instance, it was among the first, if not the first road in the country, to supply reclining chairs, luxurious parlor coaches, dining cars, and the like, and it led the way in substituting steel rails for iron, which are now only retained on side-tracks and one unimportant branch. Thus, of the total 1088.83 miles of track, over 934 miles are steel rails of sixty and seventy pounds to the yard, and of this, 5,609 tons of new steel rails were laid during 1883. Besides this, twenty-seven spans of wooden bridge, of an aggregate length of 1,699 feet, were replaced during the year, with iron bridge, at a cost of $7,122.21.

In consequence of these and other improvements such as these, and of the rapidity, safety and precision of travel, the road is a leading favorite with the public, and each year shows an advanced figure in its gross and net earnings. In 1883 the gross earnings per mile of road were $10,368 $\frac{11}{100}$. and the net earnings $4,625.50 per mile, while in 1882 the figures showed respectively $9,677.80 and $4,388.92, the increase in the gross earnings being 7.243 per cent., and in the net earnings 5.390 per cent. Thus, while the operating expenses per mile were increased—meaning a corresponding comfort and safety of the public—from 64.602 per cent. to

55.387 per cent of the gross earnings, the actual gain in net income was in the neighborhood of $200,000, a significant illustration of the wisdom of judicious liberality in management. The following is a summary of the earnings and expenses, including taxes, of the road for the past two years:

	1882.	1883.
Earnings from all sources	$8,215,495.12	$8,810, 610.38
Operating expenses	4,485,881.53	4,879,958.32
Net earnings	$3,729,613.59	$3,930,652.06
Operating expenses per ct. of gross earnings	54 602-1000	55 387-1000
Increase in gross earnings		$595,115.26
Increase in operating expenses		394,076.79
Increase in net earnings		$201,038.47

THE CHICAGO & NORTHWESTERN.

As good a way as any to illustrate the difference between "Auld Lang Syne" and the *present* in railway service, is to select one of the typical modern roads and give a description of the territory that it covers and the service that it gives the traveling public. The CHICAGO & NORTHWESTERN system starts at Chicago, from which point it stretches out to the North, Northwest and West, through the richest and best portions of the Northwest. The following are among its through trunk lines:

FIRST—A line running nearly due north along the shore of Lake Michigan, through the cities of Milwaukee Fond du Lac, Oshkosh, Appleton, Green Bay to Ishpeming and Marquette, Houghton, Hancock, Calumet and the copper regions of Michigan, carrying passengers from Chicago through Wisconsin to the Northern Peninsula of Michigan without change of cars.

SECOND—A line running a little west of the above through

the cities of Harvard, Janesville, Jefferson, Watertown, and intersecting the former at Fond du Lac.

THIRD—A line running west from Milwaukee through Waukesha and Madison to Galena and Montfort.

FOURTH—A line running west from Sheboygan on Lake Michigan through Fond du Lac, Ripon and Green Lake to Princeton.

FIFTH—A line from Chicago through Harvard, Beloit, Madison, Devil's Lake, Baraboo, Elroy, Eau Claire and Hudson to St. Paul and Minneapolis. Trains on this line connect in a union depot with trains for Fargo, Bismarck, the Yellowstone National Park, and all points in the Northwestern Pacific Coast regions. Connecting with this line at Eau Claire is a branch that runs to Spooner, Wis., where it divides—one arm running to Ashland, Washburn and Bayfield; and the other to Superior City and Duluth.

SIXTH—Lines running from both Chicago and St. Paul and Minneapolis, through to Huron, Pierre, Watertown, Redfield, Aberdeen, Columbia, and the famous grain regions of Central Dakota.

SEVENTH—A line running nearly due west from Chicago through Dixon, Sterling, Clinton, Cedar Rapids, Des Moines, Marshalltown to Council Bluffs, Omaha, Sioux City, Norfolk, Fremont, Neligh, Valentine, and the fertile fields of Northeastern Nebraska. Through trains are run by this line carrying passengers from Chicago to San Francisco with but one change of cars, and from Chicago to Denver without change.

EIGHTH—A line from St. Paul and Minneapolis to Sioux City, Iowa.

NINTH—A line from St. Paul and Minneapolis to Des Moines, Iowa.

TENTH—A line connecting with the main Iowa line at both Tama and Ames, and running through Northwestern Iowa to Central Dakota points.

These, together with the shorter branches shooting off from the main lines in various directions, form an aggregate of nearly 6,000 miles of road, all under the management of this great corporation. But not alone in the number of miles owned does this road excel. In lieu of the old straps and light irons and slow time it carries its passengers safely at the rate of forty miles an hour over smooth steel rails on solid rock foundation.

The old-fashioned and uncomfortable day car is superseded on this line by palatial coaches that are models of comfort and elegance, and that at night are transformed into luxurious sleeping apartments furnished with comfortable beds and all appliances for rest and refreshment. But the climax of all improvements in the modern over the ancient railway service is in the Dining Cars as introduced and operated by this company.

THE CHICAGO, MILWAUKEE & ST. PAUL RAILWAY.

This is one of the most extensive roads, or rather systems of roads, in the country, running from Chicago to Council Bluffs, St. Paul, Minneapolis, Sioux City, Running Water, Chamberlain and Aberdeen, and has a direct connection from St. Louis, via the Chicago, Burlington & Quincy and Wabash, St. Louis & Pacific Railways, to all points in the North and Northwest.

Their lines from Chicago to Council Bluffs and St. Paul are the Short Lines. The mileage of this vast system is 4,804 miles, which is the greatest number of miles operated under one management in this country, and extends through the richest grain producing counties in the States of Iowa, Minnesota and Dakota. The earnings of this corporation have, during the past year, reached the expectations of its management, considering the depressed state of commerce; this is owing to its large and complete equipment, good

time, and excellent facilities for handling business generally, placing it in the front rank of the leading railway systems of the West.

If the reader will glance at any well printed map, he will at once see the importance of this system, not only to the people of the Northwest, but to the country at large. It connects all of the great Western and Northwestern markets, and traverses by its numerous main lines and branches, the best farming sections of the States in which its tracks are laid. St. Paul is a flourishing and important center of trade, and the Chicago, Milwaukee and St. Paul, will always remain one of the principal factors of its growth and prosperity. The St. Paul Road brings enormous quantities of corn, wheat and lumber, and thousands of hogs, cattle and sheep to Chicago and Milwaukee, and in return carries west from these cities and distributes through its territory thousands of tons of merchandise, agricultural implements, and other manufactured articles. It enjoys a large and constantly increasing passenger traffic, and takes from Chicago its share of the foreign immigrants who pass North and Northwest. The St. Paul Company has done a great deal in peopling the States and Territories of the Northwest, but it has yet more to do in this respect. Its various lines are dotted with thrifty villages and cities, nearly all of which have sprung up since its tracks were laid, and the country through which it passes is increasing in population and wealth with every year. The stability of the road and the confidence of the monied classes in its management, are shown by the strength of its stocks and bonds, which are eagerly sought for investment purposes.

LOUISVILLE, NEW ALBANY & CHICAGO RAILROAD.

The Louisville, New Albany & Chicago Railway, popularly known as the "Monon Route," is one of the most important of all the Southern lines entering Chicago. The

main line extends from Chicago to Louisville, 323 miles, passing through Lafayette, Crawfordsville, Green Castle, Bloomington, Mitchell and New Albany, Ind. At Monon, Ind., the "Air Line" division extending from Michigan City to Indianapolis, 154 miles, intersects the main line. This division passes through Monticello, Delphi, Owasco and Frankfort, Ind.

Cedar Lake, 38 miles from Chicago on the main line, is rapidly growing into favor as a summer resort, and is visited by thousands of people each season. The lake abounds with bass, pickerel and other fish.

The famous Bedford Stone Quarries are located on the line and furnish a very large traffic.

The track, equipment and service of the "Monon Route" are first-class, making it a great favorite with the traveling public. In addition to the Chicago & Louisville Line, the company operate a through line between Chicago and Cincinnati via Indianapolis, in connection with the Cincinnati, Hamilton & Dayton Railroad, affording Southern tourists a choice of Pullman Car Routes via Louisville or Cincinnati.

Recalling the exorbitant rates, slow time, vexatious delays, and numerous changes in dingy coaches, that attended a trip to Louisville and the South of a few years ago, the business man and the tourist alike appreciate the advantages of the Monon Route, with its solid trains and Pullman palace sleepers, its reasonable rates, its fast time, its smooth tracks, and its courteous officials. Being the only line to Louisville from Chicago under one management, it offers to its patrons accommodations that no other line could, and gains the good-will of the public by its low and reasonable rates. Gaining friends daily by service and splendid equipment, supplemented by fair dealing, the Monon Route to-day is one of the most popular lines, both with the tourist whose

journey South is attended with every pleasure and comfort possible, and the merchant who finds that by this road only can he ship his wares to the Ohio River without change or delay. The traveling man, knowing the comforts of a solid train, and Pullman buffet sleepers, and the finest only are run via Monon — will take no other line to Louisville. To the Monon Route belongs the credit of introducing the first and only Pullman sleeping-car line through from Chicago to Jacksonville without change, and it is still the only route by which Pullman car service is secured via Louisville to Florida. The route is characteristically a tourist's line, leading from the South to the cool resorts of the Northwest in summer, and from the chilly blasts of the North to the balmy breezes of a mild South in winter. The time was, when a trip from Chicago to Florida or the Gulf resorts was a slow and tedious undertaking, attended by so many annoyances that few had the courage to make it. Now, thanks to the Monon Route, a trip to Southern resorts is a pleasure in itself.

THE ILLINOIS CENTRAL.

The Illinois Central Railroad has been one of the most important factors in the development of Chicago and the West. It was one of the first roads built, and has been the commercial backbone of Illinois, making its products marketable, and increasing its growth and wealth. It now covers fifteen degrees of latitude, and connects Chicago with the Missouri River and the Gulf of Mexico.

It is the only road that has an unbroken, direct line to the South, and makes a journey to the land of perpetual summer agreeable, safe and speedy. Through cars of the most luxurious pattern run to all the desirable resorts sought by winter tourists, and the journey offers attractions that can not be found elsewhere.

The completion of the Pensacola & Atlantic Railway gives a through line from Chicago to Jacksonville, Fla., by way of New Orleans, and permits the tourist to visit all of the popular resorts on the Gulf coast. The connections for Texas and California are such as to offer the best winter route, the line being always free from snow and ice and cold, and the fare is as low as by any other road.

San Antonio, Austin, Galveston, and Houston, Texas, are made the objective points for no less than twelve routes, via New Orleans going, and via either the Missouri Pacific or Iron Mountain routes and St. Louis returning, or vice versa. Havana, Cuba, and Hot Springs and Eureka Springs, Ark., are also excursion points.

To the northward the road winds its way from Chicago to the rich farm lands of Iowa to Sioux City on the Missouri River, where close connection is made with the diverging lines through Dakota and Nebraska, thus giving Chicago direct access to the immense wheat fields of those States. At Waterloo, Iowa, the Cedar Falls and Minnesota Branch extends a distance of eighty miles to Mona, situated on the State line between Iowa and Minnesota, and where entrance to the latter State is made over the Chicago, Milwaukee & St. Paul Railroad.

The Illinois Central was the first railroad to introduce suburban trains, having commenced running them as early as 1856. To its management is due the development and growth of the beautiful suburbs south of the city, as its frequent trains made them even more accessible than some of the resident portions of Chicago that are reached only by the street cars. Upward of three million of people are carried annually upon these suburban trains, and the number that go to South Park and Pullman sometimes reaches thousands per day.

The Illinois Central embraces five divisions, and has

1,928 miles of road laid in the most efficient manner possible, is thoroughly equipped with every device of modern ingenuity for the safe and successful operation of traffic, and has justly merited its great popularity by increasing effort to accommodate and benefit its vast multitude of patrons.

WABASH, ST. LOUIS AND PACIFIC RAILWAY.

The "Wabash," as it, generally speaking, is termed, is one of the most extensive railway systems on the continent, embracing upwards of 3,500 miles in its three main divisions—the Eastern, Western, and the Chicago and Iowa Division.

As indicated by the name, the road is a direct communication with the lovely and fertile valley of the great Wabash, the Missippi Valley and the far-away Pacific slope, for the Lake region. Its division lines are operated in the States of Missouri, Indiana, Ohio, Illinois and Iowa, forming a junction at Council Bluffs with the Union Pacific, which wends its way across the Rocky mountains to the Golden Gate city. The road makes tributary to Chicago an immense scope of country, and provides our commerce with a vast system of transportation, the importance of which cannot be overestimated. The road is thoroughly equipped with every appliance of improved make for securing speed and safety on railways, and through its able management and courteous treatment of patrons, has become justly popular with the public.

MICHIGAN CENTRAL SYSTEM.

This road is the great central route through the State of Michigan, and by its widely diverging lines, which course their way in every direction through the State, there is established a direct inter-communication between the multitude of busy hives of human industry, located upon lakes

Michigan, Huron and Erie, and places them all within a few hours' ride, through magnificent scenery, and exhilarating atmosphere, to Chicago on the West and New York, through Canada on the East. The system embraces 10 divisions aggregating over 1,000 miles of rail—890 of which are steel. The rolling stock is of the most improved patterns, embracing every description of arrangement and mechanical device that can possibly conduce to safety and speed, comfort and convenience.

As before stated, it ramifies the entire State of Michigan, and makes tributary to Chicago the vast scope of territory lying between Michigan, Huron and Erie lakes, as well as large portions lying to the eastward in Canada and New York. The main line skirts the southern end of Lake Michigan on its way to Detroit, from whence the South Haven and the Grand Rapids divisions run, and where connections with the Canada Southern, Great Western and Grand Trunk lines lead into Canada; and with the Detroit, Lansing and Northern, and the Detroit, Saginaw and Bay City lines reaching to the extreme Northern limits of the State, are made; and also with other diverging lines and the steamers traversing Lake Erie to the East. The air-line division runs from Chicago by way of the main line to Niles, and thence to Jackson where it continues on the main line to Detroit. The system is perfect in all its arrangements of divisions, and strikes the great salt regions in the vicinity of Saginaw Bay, and the immense lumber regions of the State, making these valuable industries directly tributary to the wealth of Chicago.

HOTELS.

In no feature is progressive Chicago better or more forcibly illustrated than in her hotels. In addition to the large boarding-houses scattered throughout the resident portion of the city, there are about 165 regular hotels in Chicago, affording accommodation to at least 27,000 people, and remarkable as it appears, these hotels are always full of guests, and often have to resort to expedients to provide the accommodation required. With the single exception of New York, this city is better able to entertain great crowds than any other city on the continent. This was amply demonstrated during the past summer, when both the Democratic and Republican Conventions were held here.

PALMER HOUSE.

The Palmer House is a National establishment, and has acquired a world-wide fame. It is a monument of the enterprise, energy and public spirit of Potter Palmer, of whom it is only just to say, that there is no single individual who has done more to build up this city and to add to its grandeur and reputation. The house has 850 rooms, affording accommodations for 1,500 people, and is absolutely fire proof.

The whole surroundings and appurtenances of the hotel are on the grandest style, and it is conducted in a manner to please the most critical taste. It is the only hotel in the

city where the guests have a choice of the European or American plans, and they can take their meals in any one of the three magnificent dining-rooms, or in the Cafe or Restaurant. The restaurant, which is the most elegant in Chicago, and is not surpassed in the country, is an imperial apartment, circular in form, and made of marble and mirrors, It is the favorite resort of the fashionable people of the city for lunches and dinners, and for suppers after the theater or opera.

The classes of guests a hotel entertains are the best index of its character, and those who go to the Palmer House are men who know where to find the best accommodations. Mr. Willis Howe, the managing partner, gives his personal attention to every detail of the management of this palatial house.

Attached to the Palmer House, and connecting with the main office are the finest barber shop and the finest bathrooms in the world. They are known as "The Garden of Eden," from the name of Mr. W. S. Eden, the proprietor. There is no place of the kind on either continent fitted up with such magnificence. The cost of the fixtures in the barber shop alone was $23,000, and of the bathing department, $30,000. The former, which is 40x100 feet in size, is furnished with mirrors on every side and overhead, in which are reflected many times the burnished brass fixtures, the gilded columns and cornices, the marble walls and floors, the elegant plush and velvet sofas and chairs. In all, there are 5,000 square feet of mirrors, one being 100x150 inches, the largest in this country. The washstand, which cost $3,000, is composed of seven different colored costly marbles, and over it is a handsomely designed marble arch in which is a pyramid of elegant French clocks that are set to the time of different cities.

The bathing department is a marvel. Every known bath

can be had. Marble floors, marble baths, and marble scrubbing beds are everywhere. In the "Macerecure" room twenty different kinds of baths are furnished. In one room is a diving tank, 15x50, with a depth of 5½ feet. The "needle" shower bath, with its million sprays, cost $1,000. The Russian and Turkish bath-rooms are fitted up in the highest style of perfection, and throughout the whole department nothing is wanting to make it the most consummate triumph of modern art and taste. To these will soon be added an apartment exclusively for ladies, in which all the baths before enumerated will have a counterpart. The fittings of these are in even more elaborate and costly designs than those already described. Mr. Eden is also the proprietor of the barber shop at the Tremont.

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